

INVENTOR SEARCH

=> fil cap; d que nos 144

FILE 'CAPLUS' ENTERED AT 10:10:55 ON 17 MAR 2008

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FILE COVERS 1907 - 17 Mar 2008 VOL 148 ISS 12

FILE LAST UPDATED: 16 Mar 2008 (20080316/ED)

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'OBI' IS DEFAULT SEARCH FIELD FOR 'CAPLUS' FILE

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L1          1 SEA FILE=CAPLUS ABB=ON  US2006-569155/AP
L3          STR
L6          1 SEA FILE=REGISTRY SSS FUL L3
L7          1 SEA FILE=REGISTRY ABB=ON  7631-86-9
L8          1 SEA FILE=REGISTRY ABB=ON  79-06-1
L9          1 SEA FILE=REGISTRY ABB=ON  79-22-1
L10         1 SEA FILE=REGISTRY ABB=ON  15761-39-4
L11         411148 SEA FILE=CAPLUS ABB=ON  L7
L12         21174 SEA FILE=CAPLUS ABB=ON  (L8 OR L9 OR L10)
L19         3 SEA FILE=CAPLUS ABB=ON  L6
L38         40 SEA FILE=CAPLUS ABB=ON  ANTIA F?/AU
L39         1852 SEA FILE=CAPLUS ABB=ON  BOYD R?/AU
L40         84 SEA FILE=CAPLUS ABB=ON  DASILVA J?/AU
L41         146 SEA FILE=CAPLUS ABB=ON  GOLDEN K?/AU
L42         1 SEA FILE=CAPLUS ABB=ON  NTIGYABAAH J?/AU
L43         547 SEA FILE=CAPLUS ABB=ON  WELCH C?/AU
L44         2 SEA FILE=CAPLUS ABB=ON  L1 OR ((L38 OR L39 OR L40 OR L41 OR
          L42 OR L43) AND ((L11 AND L12) OR L19))
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L44 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN

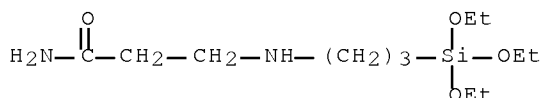
ACCESSION NUMBER: 2005:1319723 CAPLUS Full-text

DOCUMENT NUMBER: 144:219440

TITLE: Preparation and evaluation of novel stationary phases for improved chromatographic purification of pneumocandin B0

AUTHOR(S): Welch, Christopher J.; DaSilva, Jimmy O.; Nti-Gyabaah, Joseph; Antia, Firoz; Goklen, Kent; Boyd, Russell

CORPORATE SOURCE: Merck Research Laboratories, Merck & Co. Inc., Rahway,
NJ, 07065, USA
SOURCE: Journal of Chromatography, A (2006), 1101(1-2),
204-213
CODEN: JCRAEY; ISSN: 0021-9673
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Preparation and evaluation of a number of stationary phases for improved
chromatog. purification of pneumocandin B0, a key intermediate in the
synthesis of the antifungal agent, Cancidas, has led to the identification of
several materials with potential for improved performance.
IT 18388-80-2
RL: AMX (Analytical matrix); ANST (Analytical study)
(preparation and evaluation of novel stationary phases for improved
chromatog. purification of pneumocandin B0)
RN 18388-80-2 CAPLUS
CN Propanamide, 3-[[3-(triethoxysilyl)propyl]amino]- (CA INDEX NAME)



REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L44 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:260178 CAPLUS Full-text
DOCUMENT NUMBER: 142:312724
TITLE: Stationary phases and a purification process using the
stationary phases
INVENTOR(S): Antia, Firoz D.; Boyd, Russell;
Dasilva, Jimmy O.; Goklen, Kent E.;
Ntigyabaah, Joseph; Welch, Christopher
J.
PATENT ASSIGNEE(S): Merck & Co., Inc., USA
SOURCE: PCT Int. Appl., 32 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005026323	A2	20050324	WO 2004-US28657	20040901
WO 2005026323	A3	20050915		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,			

SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
SN, TD, TG

AU 2004273029	A1	20050324	AU 2004-273029	20040901
CA 2537574	A1	20050324	CA 2004-2537574	20040901
EP 1663275	A2	20060607	EP 2004-783035	20040901
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
CN 1845751	A	20061011	CN 2004-80025505	20040901
JP 2007504460	T	20070301	JP 2006-525452	20040901
IN 2006DN00878	A	20070810	IN 2006-DN878	20060220
US 2007010655	A1	20070111	US 2006-569155	20060221 <--
PRIORITY APPLN. INFO.:			US 2003-500624P	P 20030905
			WO 2004-US28657	W 20040901

OTHER SOURCE(S): MARPAT 142:312724

AB This invention relates to a novel stationary phase of Formula I and a method for purifying a peptide or lipopeptide in liquid chromatog. using select stationary phases, including the stationary phases of Formula I to improve the resolution and/or productivity of the purification This chromatog. method can be used for either an anal. or preparative scale purification

IT 79-06-1DP, Acrylamide, reaction product with aminopropyl-modified silica 79-22-1DP, Methyl chloroformate, reaction product with aminopropyl-modified silica 7631-86-9DP, Silica, aminopropyl-modified, reaction product with acrylamide or Me chloroformate or BOC-L-proline 15761-39-4DP, reaction product with aminopropyl-modified silica, deprotected

RL: ARU (Analytical role, unclassified); PEP (Physical, engineering or chemical process); PYP (Physical process); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); PROC (Process)

(stationary phases and a purification process using the stationary phases)

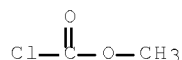
RN 79-06-1 CAPLUS

CN 2-Propenamide (CA INDEX NAME)



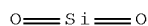
RN 79-22-1 CAPLUS

CN Carbonochloridic acid, methyl ester (CA INDEX NAME)



RN 7631-86-9 CAPLUS

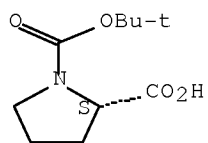
CN Silica (CA INDEX NAME)



RN 15761-39-4 CAPLUS

CN 1,2-Pyrrolidinedicarboxylic acid, 1-(1,1-dimethylethyl) ester, (2S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



STRUCTURE SEARCH

=> fil reg; d stat que 16

FILE 'REGISTRY' ENTERED AT 10:11:25 ON 17 MAR 2008

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STRUCTURE FILE UPDATES: 16 MAR 2008 HIGHEST RN 1008362-16-0

DICTIONARY FILE UPDATES: 16 MAR 2008 HIGHEST RN 1008362-16-0

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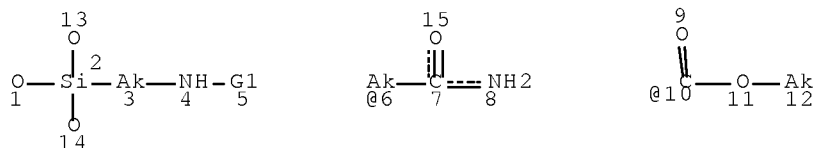
TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

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<http://www.cas.org/support/stngen/stdoc/properties.html>

L3 STR



VAR G1=6/10

NODE ATTRIBUTES:

CONNECT IS E2 RC AT 3

CONNECT IS E2 RC AT 6

CONNECT IS E1 RC AT 12

DEFAULT MLEVEL IS ATOM

GGCAT IS SAT AT 3

GGCAT IS SAT AT 6

GGCAT IS SAT AT 12

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 15

STEREO ATTRIBUTES: NONE

L6 1 SEA FILE=REGISTRY SSS FUL L3

100.0% PROCESSED 15178 ITERATIONS

1 ANSWERS

SEARCH TIME: 00.00.01

=> fil capl; d que nos l19
 FILE 'CAPLUS' ENTERED AT 10:11:30 ON 17 MAR 2008
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FILE COVERS 1907 - 17 Mar 2008 VOL 148 ISS 12
 FILE LAST UPDATED: 16 Mar 2008 (20080316/ED)

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 'OBI' IS DEFAULT SEARCH FIELD FOR 'CAPLUS' FILE

L3 STR
 L6 1 SEA FILE=REGISTRY SSS FUL L3
 L19 3 SEA FILE=CAPLUS ABB=ON L6

=> s l19 not l44
 L45 2 L19 NOT L44 L44=INVENTOR SEARCH ANSWER SET

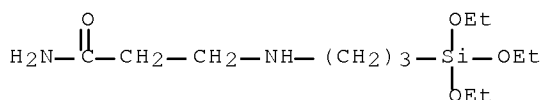
=> d ibib abs hitstr l45 1-2

L45 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1962:469378 CAPLUS Full-text
 DOCUMENT NUMBER: 57:69378
 ORIGINAL REFERENCE NO.: 57:13804f-i
 TITLE: Aminoalkylsilicon compounds
 INVENTOR(S): Pike, Ronald M.; Morehouse, Edward L.
 PATENT ASSIGNEE(S): Union Carbide Corp.
 SOURCE: 11 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: Unavailable
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
US 3033815		19620508	US 1959-836623	19590828
PRIORITY APPLN. INFO.:			US	19590828
AB	Aminoalkylsilicon compds. of the formula (I) H ₂ NCaH ₂ a-SiRbY ₃ -b (a = at least 3, b = 0 to 2, Y = alkoxy radicals, R = alkyl or aryl) react with BHC: CR'X(II) (B = hydrogen, alkyl or aryl; R' = hydrogen or alkyl; X = nitrile or COD, wherein D is hydrogen, alkyl, aryl, alkoxy, or amino) forming organosilicon compds. having at least one group of the formula			

XCHR'CHBNH₂CaH₂aSiRbY₃-b and (XCHR'CHB)2N₂CaH₂aSiRbY₃-b. To 75 g. γ-aminopropyltriethoxysilane was added 29.2 g. Me acrylate and the mixture was heated under constant stirring at 80°/2 mm. Distillation of the product 61.4 g. γ-(N-2-carbomethoxyethyl)aminopropyltriethoxysilane (III), b₀..33-0.38 109-11°, n₂₅D 1.4308, and 3.6 g. γ-N,N- bis(2 - carbomethoxyethyl)aminopropyltriethoxysilane, b₀.0,-0.9 145-67°, n₂₅D 1.4388, besides two unidentified fractions b₀.55-0.38 55-104° and b₀.33-0.30 130-140°. Hydrolysis of 32 g. III with 18 g. H₂O and 15 ml. concentrated HCl at 33°, with a stream of argon passing through the solution, yielded after evaporation of the liquid products (2 hrs. at 100°/1-5 mm.) 24.7 g. γ, -(N-2-carbomethoxyethyl)aminopropylpolysiloxane, a white, resinous product. I may also be an aminoalkylsiloxane polymer or a siloxane copolymer containing the unit H₂N₂CaH₂aSiRbO(3-b)/2, forming with II (XCHR'CHB)2N₂CaH₂aSiRbO(3- b)/2 and XCHRtCHBNH₂CaH₂aSiRbO(3-b)/2. The products are useful as sizes for fibrous materials, particularly fibrous glass materials, and as adhesives and flocculation agents.

IT 18388-80-2P, Propionamide, 3-[[3-(triethoxysilyl)propyl]amino]-
 RL: PREP (Preparation)
 (preparation of)
 RN 18388-80-2 CAPLUS
 CN Propanamide, 3-[[3-(triethoxysilyl)propyl]amino]- (CA INDEX NAME)



L45 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN

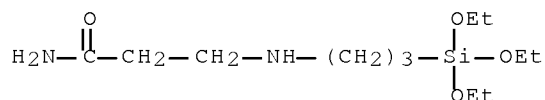
ACCESSION NUMBER: 1962:60684 CAPLUS
 DOCUMENT NUMBER: 56:60684
 ORIGINAL REFERENCE NO.: 56:11621d-g
 TITLE: Organosilicon compounds and process for producing same
 INVENTOR(S): Pike, Ronald Marston; Morehouse, Edward L.
 PATENT ASSIGNEE(S): Union Carbide Corp.
 DOCUMENT TYPE: Patent
 LANGUAGE: Unavailable
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 882051		19611108	GB 1957-30940	19571003
DE 1114326			DE	
PRIORITY APPLN. INFO.:			US	19561012
			GB	19571003

AB Organosilicon compds. containing substituted amino groups linked to the Si atom through a polymethylene linkage of at least 3 C atoms are prepared by the reaction of an aminoalkyl Si compound with an α,β- olefinically unsatd. organic compound at 80-80°. (γ- Aminopropyl)triethoxy-silane (I) (75 g.) and 29.2 g. Me acrylate were stirred together at 2 mm. to a temperature of 80°. The product was fractionally distilled The fraction b₀.33-0.38 109-11° was 61.4 g. [γ-(N-2-carbomethoxyethyl)aminopropyl]triethoxysilane, n₂₅ 1.4308. Prepared similarly was [γ-(N,N-di-2-carbomethoxyethyl)aminopropyl]triethoxysilane, b₀.4-0.45 149-66°, n₂₅D 1.4372-1.4379.

Acrylamide (89.1 g.) is added dropwise to 110.7 g. I with stirring, the mixture heated to 80° 4 hrs., distilled in vacuo until 49.5 g. was collected. The fraction b1.52-2.5 85-192°, n₂₅ 1.4448-1.4521 was [γ-(N-2-aminoethylamino-propyl)]triethoxysilane. I (442.6 g.) under argon was cooled to 5°, 213.4 g. acrylonitrile added dropwise below 30°, the mixture kept overnight, and a 327.4-g. portion distilled; the 210.6-g. fraction b0.6-0.7 127-32° was [γ-(N-2-cyanoethyl)-aminopropyl]triethoxysilane. Prepared similarly were: [δ-(N-2-cyanoethyl)aminobutyl]triethoxysilane, b0.3-0.4 128-35°, n₂₅ 1.4370; [δ-(N-2-cyanoethyl)butyl]methyldiethoxy silane, b0.9 115-16°, n₂₅ 1.4423; [δ-(N-1-phenyl-2-carbethoxyethyl)-aminobutyl]methyldiethoxysilane, b0.5152-62°, n₂₅ 1.4776.

IT 18388-80-2F, Propionamide, 3-[[3-(triethoxysilyl)propyl]amino]-
 RL: PREP (Preparation)
 (preparation of)
 RN 18388-80-2 CAPLUS
 CN Propanamide, 3-[[3-(triethoxysilyl)propyl]amino]- (CA INDEX NAME)



SEARCH OF REGISTRY NUMBERS OF COMPONENTS

=> fil capl; d que l15; d que l22; d que l24; d que l26; d que l32; d que l33; d que l34

FILE 'CAPLUS' ENTERED AT 10:12:08 ON 17 MAR 2008

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FILE COVERS 1907 - 17 Mar 2008 VOL 148 ISS 12

FILE LAST UPDATED: 16 Mar 2008 (20080316/ED)

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'OBI' IS DEFAULT SEARCH FIELD FOR 'CAPLUS' FILE

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L9          1 SEA FILE=REGISTRY ABB=ON  79-22-1
L10         1 SEA FILE=REGISTRY ABB=ON  15761-39-4
L11         411148 SEA FILE=CAPLUS ABB=ON  L7
L12         21174 SEA FILE=CAPLUS ABB=ON  (L8 OR L9 OR L10)
L13         411 SEA FILE=CAPLUS ABB=ON  L11 AND L12
L14         102308 SEA FILE=CAPLUS ABB=ON  (STATIONARY/OBI OR SOLID/OBI) (L) (PHASE#
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L9          1 SEA FILE=REGISTRY ABB=ON  79-22-1
L10         1 SEA FILE=REGISTRY ABB=ON  15761-39-4
L12         21174 SEA FILE=CAPLUS ABB=ON  (L8 OR L9 OR L10)
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L20         34779 SEA FILE=CAPLUS ABB=ON  IMMOBILIZATION/CW
L22         3 SEA FILE=CAPLUS ABB=ON  L12 AND L16 AND L20
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L9          1 SEA FILE=REGISTRY ABB=ON  79-22-1
L10         1 SEA FILE=REGISTRY ABB=ON  15761-39-4
L11         411148 SEA FILE=CAPLUS ABB=ON  L7
L12         21174 SEA FILE=CAPLUS ABB=ON  (L8 OR L9 OR L10)
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L8        1 SEA FILE=REGISTRY ABB=ON 79-06-1
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L10       1 SEA FILE=REGISTRY ABB=ON 15761-39-4
L11      411148 SEA FILE=CAPLUS ABB=ON L7
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L13      411 SEA FILE=CAPLUS ABB=ON L11 AND L12
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L26      3 SEA FILE=CAPLUS ABB=ON L25 AND L13 AND L20

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L9        1 SEA FILE=REGISTRY ABB=ON 79-22-1
L10       1 SEA FILE=REGISTRY ABB=ON 15761-39-4
L11      411148 SEA FILE=CAPLUS ABB=ON L7
L12      21174 SEA FILE=CAPLUS ABB=ON (L8 OR L9 OR L10)
L20      34779 SEA FILE=CAPLUS ABB=ON IMMOBILIZATION/CW
L30      811992 SEA FILE=CAPLUS ABB=ON 9/SC,SX =BIOCHEMICAL METHODS
L32      17 SEA FILE=CAPLUS ABB=ON L11 AND L30 AND L12 AND L20

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L11      411148 SEA FILE=CAPLUS ABB=ON L7
L12      21174 SEA FILE=CAPLUS ABB=ON (L8 OR L9 OR L10)
L25      2342540 SEA FILE=CAPLUS ABB=ON PHARMAC?/SC,SX
L30      811992 SEA FILE=CAPLUS ABB=ON 9/SC,SX
L33      5 SEA FILE=CAPLUS ABB=ON L11 AND L30 AND L12 AND L25

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L8        1 SEA FILE=REGISTRY ABB=ON 79-06-1
L9        1 SEA FILE=REGISTRY ABB=ON 79-22-1
L10       1 SEA FILE=REGISTRY ABB=ON 15761-39-4
L12      21174 SEA FILE=CAPLUS ABB=ON (L8 OR L9 OR L10)
L16      8921 SEA FILE=CAPLUS ABB=ON L7/D
L30      811992 SEA FILE=CAPLUS ABB=ON 9/SC,SX
L34      7 SEA FILE=CAPLUS ABB=ON L16 AND L12 AND L30

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=> s 115,122,124,126,132,133,134 not 144,119
L46      40 (L15 OR L22 OR L24 OR L26 OR L32 OR L33 OR L34) NOT (L44 OR L19)
          L44,L19 WERE PREVIOUSLY PRINTED

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=> d ibib abs hitind hitstr 146 1-40; fil hom

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L46 ANSWER 1 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:190723 CAPLUS Full-text

DOCUMENT NUMBER: 148:246486

TITLE: Multifunctional magnetic composites for stem cell therapy and/or tissue diagnostics

PATENT ASSIGNEE(S): Mueller-Schulte, Detlef, Germany

SOURCE: Ger. Offen., 19pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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DE 102006037702	A1	20080214	DE 2006-102006037702	20060811
PRIORITY APPLN. INFO.:			DE 2006-102006037702	20060811

AB The invention concerns multifunctional polymer carriers that encapsulate magnetic colloids and active substances, e.g. growth factors; stem cells and target receptor-recognizing ligands are coupled onto the surface of the magnetic composites. Due to their specific recognizing features the multifunctional carriers can bind to stem cells and target tissues thus allowing for cell and tissue-specific therapy of various diseases. The effect of the therapy can be enhanced by homing the magnetic stem cell composites with a static magnetic field to the target tissues/cells. Active substance dissoln. can be promoted with high frequency magnetic field and/or ultrasound. Thus a solution of celluloseacetate butyrate in p-xylol and 2-butanol was prepared To the solution a magnetic colloid (medium particles size 74 nm) that was stabilized with oleic acid was added; the obtained suspension was mixed with a mixture of 2-hydroxyethyl methacrylate, glycidyl methacrylate, ethylene dimethacrylate and 2,2'- azobis(isobutyronitrile). Polymerization was carried out in nitrogen atmospheric; formed particles were isolated, washed and functionalized with diethylamine in an ethanol-DMSO mixture Functionalized magnetic composites were dried under sterile conditions and used for binding multipotent adult progenitor cells from a culture medium. Unbound cells were separated; magnet-bound stem cells could be used for injections or infusions.

CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 3

IT Alzheimer's disease
Arthritis
Bone marrow, disease
Burn
Curie temperature (ferroelectric)
Cytotoxic agents
Diabetes mellitus
Diagnostic agents
Dissolution
Ferromagnetic materials
Genetic vectors
Heart, disease
Hematopoietic precursor cell
Immobilization, molecular or cellular
Infusion drug delivery systems
Kidney, disease
Liver, disease
Magnetic field effects
Neoplasm
Osteoarthritis
Parkinson's disease

Particle size
 Pharmaceutical injections
 Plasmids
 Sound and Ultrasound
 Stem cell
 Viscosity

(multifunctional magnetic composites for stem cell therapy and/or tissue diagnostics)

IT 79-06-1D, Acrylamide, polymers 79-10-7D, Acrylic acid, polymers
 79-41-4D, Methacrylic acid, polymers 107-02-8D, Acrolein, polymers
 818-61-1D, polymers 2210-25-5D, N-Isopropylacrylamide, polymers
 7440-02-0, Nickel, biological studies 7440-50-8, Copper, biological
 studies 7631-86-9, Silica, biological studies 9000-69-5,
 Pectin 9002-89-5, Polyvinylalcohol 9002-98-6, Polyethylenimine
 9003-05-8D, Polyacrylamide, N-substituted 9003-11-6, Ethylene
 oxide-propylene oxide copolymer 9004-34-6, Cellulose, biological studies
 9004-34-6D, Cellulose, derivs. 9004-54-0, Dextran, biological studies
 9004-54-0D, Dextran, grafts with polyamino acids or polyethylene glycol
 alkyl ethers 9004-61-9, Hyaluronic acid 9004-64-2,
 Hydroxypropylcellulose 9005-32-7, Alginic acid 9005-49-6, Heparin,
 biological studies 9012-36-6, Agarose 9012-76-4, Chitosan 9042-14-2,
 Dextransulfate 9057-02-7, Pullulan 24980-41-4, Poly-ε-
 caprolactone 25014-12-4, Polymethacrylamide 25068-14-8, Polyacrolein
 25189-55-3, Poly-N-isopropylacrylamide 25189-55-3D, Poly-N-
 isopropylacrylamide, N-substituted 25248-42-4, Poly[oxy(1-oxo-1,6-
 hexanediyl)] 25322-68-3D, Polyethylene glycol, ethers, grafts with
 dextran 26009-03-0, Polyglycolide 26023-30-3, Poly[oxy(1-methyl-2-oxo-
 1,2-ethanediyl)] 26202-08-4, Polyglycolide 26680-10-4, Polylactide
 94196-72-2 229175-35-3, Iron nickel zinc oxide (Fe₂Ni_{0.24}Zn_{0.76}O₄)
 RL: DGN (Diagnostic use); TEM (Technical or engineered material use); THU
 (Therapeutic use); BIOL (Biological study); USES (Uses)

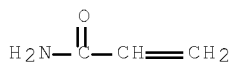
(multifunctional magnetic composites for stem cell therapy and/or tissue diagnostics)

IT 79-06-1D, Acrylamide, polymers 7631-86-9, Silica,
 biological studies
 RL: DGN (Diagnostic use); TEM (Technical or engineered material use); THU
 (Therapeutic use); BIOL (Biological study); USES (Uses)

(multifunctional magnetic composites for stem cell therapy and/or tissue diagnostics)

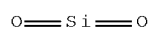
RN 79-06-1 CAPLUS

CN 2-Propenamide (CA INDEX NAME)



RN 7631-86-9 CAPLUS

CN Silica (CA INDEX NAME)



DOCUMENT NUMBER: 148:263385
 TITLE: Method for manufacture of monodisperse
 nanoscale/microscopic polymer hollow microsphere
 INVENTOR(S): Yang, Xinlin; Liu, Guangyu; Li, Guoliang; Bai, Feng;
 Huang, Bo
 PATENT ASSIGNEE(S): Nankai University, Peop. Rep. China
 SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 10pp.
 CODEN: CNXXEV
 DOCUMENT TYPE: Patent
 LANGUAGE: Chinese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 101113183	A	20080130	CN 2007-10057065	20070403

PRIORITY APPLN. INFO.: CN 2007-10057065 20070403

AB The inner particle diameter, and wall thickness of the title hollow microspheric resin is 10 nm-10 μ m and 10-500 nm, resp. The regular hollow microsphere is homopolymer of polyene monomers, or 20-100% crosslinked copolymer of polyene monomers and other functional vinyl monomers. The preparation method comprises: (1) distilling monomers in the presence of a template, and (2) precipitating for polymerization to obtain monodisperse polymer hollow microspheres with different inner particle diams. and wall thicknesses. The product is used in controlled delivery and release systems of dyes, cosmetics, drugs, enzymes and proteins, or is used as carrier of light fillers, nano/micro containers, low dielec. constant materials and catalysts. The product is also applied in artificial cells, disease diagnosis and biol. substance separation

CC 37-3 (Plastics Manufacture and Processing)
 Section cross-reference(s): 6, 7, 9, 41, 62, 63

IT 79-06-1DP, Acrylamide, polymers 79-10-7DP, Acrylic acid, polymers 80-62-6DP, Methyl methacrylate, polymers 88-12-0DP, polymers 96-33-3DP, Methyl acrylate, polymers 100-43-6DP, 4-Vinylpyridine, polymers 106-91-2DP, 2,3-Epoxypropyl methacrylate, polymers 110-26-9DP, Methylenebisacrylamide, polymers 1321-74-0DP, Divinylbenzene, polymers 2210-25-5DP, Isopropylacrylamide, polymers 2274-11-5DP, Ethylene glycol diacrylate, polymers 5459-38-1DP, Glycerol triacrylate, polymers 9003-69-4P, Poly(divinylbenzene) 9017-37-2P, Divinylbenzene-methyl methacrylate copolymer 9017-40-7P, Divinylbenzene-4-vinylpyridine copolymer 9058-17-7P, Divinylbenzene-N-vinylpyrrolidone copolymer 25249-16-5P 26949-19-9P, Poly(N,N'-methylenebisacrylamide) 31693-08-0P, Ethylene glycol methacrylate-methacrylic acid copolymer 50602-21-6P, Divinylbenzene-methacrylic acid copolymer 61722-10-9P, Acrylamide-divinylbenzene copolymer 118496-58-5P 331249-49-1P
 RL: BUU (Biological use, unclassified); CAT (Catalyst use); IMF (Industrial manufacture); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (manufacture of monodisperse nanoscale-microscopic vinyl polymer hollow microsphere)

IT 7631-86-9, Silica, uses 9003-01-4, Poly(acrylic acid)
 RL: NUU (Other use, unclassified); USES (Uses)
 (template; manufacture of monodisperse nanoscale-microscopic vinyl polymer hollow microsphere)

IT 79-06-1DP, Acrylamide, polymers
 RL: BUU (Biological use, unclassified); CAT (Catalyst use); IMF (Industrial manufacture); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(Uses)

(manufacture of monodisperse nanoscale-microscopic vinyl polymer hollow microsphere)

RN 79-06-1 CAPLUS

CN 2-Propenamide (CA INDEX NAME)



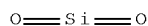
IT 7631-86-9, Silica, uses

RL: NUU (Other use, unclassified); USES (Uses)

(template; manufacture of monodisperse nanoscale-microscopic vinyl polymer hollow microsphere)

RN 7631-86-9 CAPLUS

CN Silica (CA INDEX NAME)



L46 ANSWER 3 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:1275526 CAPLUS Full-text

DOCUMENT NUMBER: 147:517680

TITLE: Analyte-releasing beads and use thereof in quantitative ELISpot or fluorispot assay

INVENTOR(S): Zand, Martin S.; Henn, Alicia D.

PATENT ASSIGNEE(S): University of Rochester, USA

SOURCE: PCT Int. Appl., 49pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

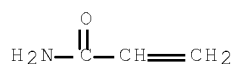
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007127981	A2	20071108	WO 2007-US67801	20070430
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			

PRIORITY APPLN. INFO.: US 2006-745982P P 20060428

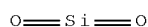
AB The present invention relates to a method of quantifying analyte secreted by a cell or released from a drug delivery vehicle, typically by ELISpot or fluorispot assay. Quantification is possible through the use of an analyte-releasing reagent that includes a bead and the analyte releasably bound to the bead, or a container pre-spotted with analyte released from the reagent. The

reagent or pre-spotted containers can be used to provide a standard curve for release of the analyte. By detecting analyte secreted by one or more cells or drug released by a drug delivery vehicle, and comparing the detected analyte to the standard curve, it is possible to quantify the amount of analyte released by the one or more cells or drug released by the drug delivery vehicle. Kits and reagents for practicing the methods of the present invention are also disclosed.

- CC 9-10 (Biochemical Methods)
Section cross-reference(s): 15, 64
- IT Flow cytometry
Human
Imaging
Immobilization, molecular or cellular
Test kits
(analyte-releasing beads and use thereof in quant. ELISpot or fluorispot assay)
- IT 79-06-1, Acrylamide, reactions 88-12-0, reactions 106-99-0, Butadiene, reactions 107-11-9, Allylamine 110-16-7, Maleic acid, reactions 1333-41-1, Methylpyridine 1337-81-1, Vinylpyridine 9002-98-6 9003-07-0, Polypropylene 9003-20-7, Polyvinyl acetate 9003-53-6, Polystyrene 9004-34-6, Cellulose, reactions 9004-54-0, Dextran, reactions 9012-76-4, Chitosan 9057-02-7, Pullulan 18358-13-9, Methacrylate, reactions 25322-68-3, Polyethylene glycol 26913-06-4, Poly[imino(1,2-ethanediyl)] 30969-75-6, Oxazoline 33611-56-2
RL: ARG (Analytical reagent use); RCT (Reactant); ANST (Analytical study); RACT (Reactant or reagent); USES (Uses)
(bead coated with, for binding linker; analyte-releasing beads and use thereof in quant. ELISpot or fluorispot assay)
- IT 7631-86-9, Silica, biological studies
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); TEM (Technical or engineered material use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(bead of; analyte-releasing beads and use thereof in quant. ELISpot or fluorispot assay)
- IT 79-06-1, Acrylamide, reactions
RL: ARG (Analytical reagent use); RCT (Reactant); ANST (Analytical study); RACT (Reactant or reagent); USES (Uses)
(bead coated with, for binding linker; analyte-releasing beads and use thereof in quant. ELISpot or fluorispot assay)
- RN 79-06-1 CAPLUS
- CN 2-Propenamide (CA INDEX NAME)



- IT 7631-86-9, Silica, biological studies
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); TEM (Technical or engineered material use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(bead of; analyte-releasing beads and use thereof in quant. ELISpot or fluorispot assay)
- RN 7631-86-9 CAPLUS
- CN Silica (CA INDEX NAME)



L46 ANSWER 4 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:1263499 CAPLUS Full-text

DOCUMENT NUMBER: 148:99332

TITLE: Retention studies of acrylamide for the design of a robust liquid chromatography-tandem mass spectrometry method for food analysis

AUTHOR(S): Rosen, Johan; Nyman, Arne; Hellenaes, Karl-Erik

CORPORATE SOURCE: National Food Administration, Uppsala, SE-751 26, Swed.

SOURCE: Journal of Chromatography, A (2007), 1172(1), 19-24
CODEN: JCRAEY; ISSN: 0021-9673

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A wide range of solid phases for SPE (solid-phase extraction) (n = 14) and HPLC (n = 9) were compared regarding the chromatog. retention of acrylamide. For SPE, a hydroxylated polystyrene-divinylbenzene copolymer phase (ENV+) gave the strongest retention. Twenty milliliter of water per g solid phase could be passed with less than 5% loss of acrylamide from the column, thus enabling significant enrichment of food exts. Other polymer phases gave varying degrees of retention, while silica bonded phases gave low retention. For HPLC, columns were evaluated both in reversed-phase and aqueous normal-phase (hydrophilic interaction chromatog.) modes. The best retention was obtained with a phase comprising porous graphitic carbon (Hypercarb), giving a k-value of 4 with water as the mobile phase. Based on these investigations, a method for anal. of acrylamide in food using liquid chromatog.-tandem mass spectrometry was designed to meet the demands of a collaborative validation trial. A comparative investigation of solid phases has not been published earlier. Thus, the paper should provide a base for new method developments regarding clean-up, enrichment and chromatog. of acrylamide. In addition, the detailed standard operating procedure (SOP) method, as used in a collaborative validation trial, is provided as an electronic supplement (www.elsevier.com).

CC 17-1 (Food and Feed Chemistry)

ST acrylamide food analysis solid phase extn; HPLC MSMS

acrylamide food analysis

IT Graphitized carbon black

RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(Carbograph4 and Carboprep 200; acrylamide retention during food anal. by HPLC-MS-MS after solid phase extraction)

IT Mass spectrometry

(HPLC combined with; acrylamide retention during food anal. by HPLC-MS-MS after solid phase extraction)

IT Food analysis

Reversed phase HPLC

Tandem mass spectrometry

(acrylamide retention during food anal. by HPLC-MS-MS after solid phase extraction)

IT HPLC

(mass spectrometry combined with; acrylamide retention during food anal. by HPLC-MS-MS after solid phase extraction)

IT Extraction

(solid-phase; acrylamide retention during food anal. by HPLC-MS-MS after solid phase extraction)

IT 7631-86-9, Nucleosil 50-5, analysis

RL: ARU (Analytical role, unclassified); ANST (Analytical study)

(Nucleosil 50-5; acrylamide retention during food anal. by HPLC-MS-MS after solid phase extraction)

IT 79-06-1, Acrylamide, analysis
 RL: ANT (Analyte); POL (Pollutant); PRP (Properties); ANST (Analytical study); OCCU (Occurrence)
 (acrylamide retention during food anal. by HPLC-MS-MS after solid phase extraction)

IT 9003-70-7, Atoll XC 9058-17-7, Oasis HLB 93050-63-6, Bond-Elut C18 119683-99-7, Hypercarb 145268-35-5, Bond-Elut SCX 151687-93-3, Bond-Elut Certify 190976-12-6, Isolute C18 200644-97-9, Isolute ENV+ 201234-27-7, Bond-Elut PPL 260062-50-8, Aquasil C 18 459428-33-2, Genesis AQ 545351-92-6, Synergi Polar RP 578730-36-6, Ace CN 657401-54-2, HyPURITY Aquastar 700373-26-8, Strata X-C 847671-83-4, ZIC-HILIC 960133-21-5, Cogent Bidentate C18 1000381-16-7, Bond Elut Certify II 1000381-17-8, Isolute Multimode 1000381-18-9, Atoll AEV
 RL: ARU (Analytical role, unclassified); ANST (Analytical study)
 (acrylamide retention during food anal. by HPLC-MS-MS after solid phase extraction)

IT 7631-86-9, Nucleosil 50-5, analysis
 RL: ARU (Analytical role, unclassified); ANST (Analytical study)
 (Nucleosil 50-5; acrylamide retention during food anal. by HPLC-MS-MS after solid phase extraction)

RN 7631-86-9 CAPLUS
 CN Silica (CA INDEX NAME)



IT 79-06-1, Acrylamide, analysis
 RL: ANT (Analyte); POL (Pollutant); PRP (Properties); ANST (Analytical study); OCCU (Occurrence)
 (acrylamide retention during food anal. by HPLC-MS-MS after solid phase extraction)

RN 79-06-1 CAPLUS
 CN 2-Propenamide (CA INDEX NAME)



L46 ANSWER 5 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2007:1212409 CAPLUS Full-text
 DOCUMENT NUMBER: 147:484943
 TITLE: Compositions and methods for human metapneumovirus monoclonal antibodies
 INVENTOR(S): Gerna, Giuseppe; Sarasini, Antonella; Revello, Maria Grazia
 PATENT ASSIGNEE(S): Diagnostic Hybrids, Inc., USA
 SOURCE: U.S. Pat. Appl. Publ., 21pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2007248962	A1	20071025	US 2006-409600	20060424
PRIORITY APPLN. INFO.:			US 2006-409600	20060424

AB The present invention discloses specific human metapneumovirus monoclonal antibodies. The antibody is at least two-fold less reactive with non-human metapneumoviruses including, but not limited to, respiratory viruses or avian metapneumoviruses. Further, the antibody is at least two-fold more reactive with a human metapneumovirus (i.e., for example, Type A or Type B) than with non-human metapneumoviruses including, but not limited to, respiratory viruses or avian metapneumoviruses. Consequently, these novel antibodies are useful as a clin. diagnostic agent, especially when using fresh nasopharyngeal aspirates. The invention also contemplates numerous diagnostic platforms that together with the novel antibodies can support economical, fast, and highly selective detection and identification of clin. inoculum samples.

INCL 435006000; 435069100

CC 15-1 (Immunochemistry)

Section cross-reference(s): 9, 14

IT Diagnosis

Electric field

Epitopes

Ferrofluids

Human

Human metapneumovirus

Immunization

Immunoassay

Isotope indicators

Microfluidic devices

Mouse

Mus musculus

Solid phase synthesis supports

Spleen

Test kits

Turkey rhinotracheitis virus

(monoclonal antibodies for diagnosis of human metapneumovirus infections)

IT 79-06-1, Acrylamide, biological studies 7631-86-9,

Silica, biological studies 9004-34-6, Cellulose, biological studies

9004-54-0, Dextran, biological studies

RL: DGN (Diagnostic use); BIOL (Biological study); USES (Uses)

(monoclonal antibodies for diagnosis of human metapneumovirus infections)

IT 79-06-1, Acrylamide, biological studies 7631-86-9,

Silica, biological studies

RL: DGN (Diagnostic use); BIOL (Biological study); USES (Uses)

(monoclonal antibodies for diagnosis of human metapneumovirus infections)

RN 79-06-1 CAPLUS

CN 2-Propenamide (CA INDEX NAME)



RN 7631-86-9 CAPLUS

CN Silica (CA INDEX NAME)

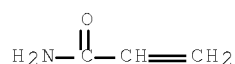
O=Si=O

L46 ANSWER 6 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2007:1116737 CAPLUS Full-text
 DOCUMENT NUMBER: 147:422484
 TITLE: Method for immobilization of proteins by covalent attachment to substrate after posttranslational modification of cysteine residues
 INVENTOR(S): Poulter, Charles Dale; Labadie, Guillermo Roberto; Gauchet, Cecile; Bohaty, Rochelle Frances Hawkins
 PATENT ASSIGNEE(S): University of Utah Research Foundation, USA
 SOURCE: PCT Int. Appl., 31pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

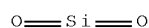
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007112007	A2	20071004	WO 2007-US7257	20070322
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

PRIORITY APPLN. INFO.: US 2006-785249P P 20060322
 AB The invention relates to the field of covalently attaching proteins to a substrate, particularly to methods of immobilizing proteins by posttranslationally modifying a cysteine residue of said protein through the addition of functional groups. The invention also relates to biol. mols. used in such techniques, including proteins, and detection methods and kits that utilize such immobilized proteins, such as a microdevice or "protein chip", a high-throughput screening device, and for the microscopy of proteins on a surface.
 CC 9-16 (Biochemical Methods)
 Section cross-reference(s): 3
 IT Immobilization, molecular or cellular
 (protein; method for immobilization of proteins by covalent attachment to substrate after posttranslational modification of cysteine residues)
 IT 79-06-1, Acrylamide, uses 1306-24-7, Cadmium selenide, uses 1314-98-3, Zinc sulfide, uses 1344-28-1, Aluminum oxide, uses 7429-90-5, Aluminum, uses 7440-06-4, Platinum, uses 7440-21-3, Silicon, uses 7440-22-4, Silver, uses 7440-50-8, Copper, uses 7631-86-9, Silica, uses 9012-36-6, Agarose 12033-89-5, Silicon nitride, uses 13463-67-7, Titanium dioxide, uses 130727-41-2D, reaction products with gold 951316-29-3D, reaction products with gold
 RL: TEM (Technical or engineered material use); USES (Uses)
 (method for immobilization of proteins by covalent attachment to substrate after posttranslational modification of cysteine residues)

IT 79-06-1, Acrylamide, uses 7631-86-9, Silica, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (method for immobilization of proteins by covalent attachment to
 substrate after posttranslational modification of cysteine residues)
 RN 79-06-1 CAPLUS
 CN 2-Propenamide (CA INDEX NAME)



RN 7631-86-9 CAPLUS
 CN Silica (CA INDEX NAME)



L46 ANSWER 7 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2007:113730 CAPLUS Full-text
 DOCUMENT NUMBER: 146:190709
 TITLE: Hemofilters comprising a cyclodextrin covalently bound
 solid support for blood
 detoxification
 INVENTOR(S): Graziani, Giorgio; Naggi, Annamaria; Torri,
 Giangiacomo
 PATENT ASSIGNEE(S): Humanitas Mirasole S.p.A., Italy; Istituto di Ricerche
 Chimiche e Biochimiche Giuliana Ronzoni
 SOURCE: PCT Int. Appl., 35pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007013122	A1	20070201	WO 2006-IT583	20060727
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
EP 1752171	A1	20070214	EP 2005-425561	20050728
R:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU			
AU 2006273606	A1	20070201	AU 2006-273606	20060727
PRIORITY APPLN. INFO.:			EP 2005-425561	A 20050728

WO 2006-IT583

W 20060727

- AB The present invention regards the use of hemofilters for the removal of bacterial toxins (lipopolysaccharides) from the blood, said hemofilters comprising a solid support to which cyclodextrins are covalently bonded. The solid support can be a fabric or non-woven fabric or a polymeric resin obtained by means of crosslinking of the cyclodextrins with appropriate crosslinking agents, for example epichlorohydrin. Biol. activity of supported cyclodextrins were assayed. Cyclodextrins crosslinked with epichlorohydrin, silica coated with polyethylenimines derivatized with CD, and polypropylene support derivatized with β -cyclodextrins were tested.
- CC 63-8 (Pharmaceuticals)
- ST hemofilter cyclodextrin covalent bound solid support
blood detoxification
- IT Detoxification
(biol.; hemofilters comprising a cyclodextrin covalently bound solid support for blood detoxification)
- IT Fibers
RL: PEP (Physical, engineering or chemical process); RCT (Reactant); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); PROC (Process); RACT (Reactant or reagent); USES (Uses)
(cellulosic; hemofilters comprising a cyclodextrin covalently bound solid support for blood detoxification)
- IT Toxins
RL: ADV (Adverse effect, including toxicity); REM (Removal or disposal); BIOL (Biological study); PROC (Process)
(endotoxins; hemofilters comprising a cyclodextrin covalently bound solid support for blood detoxification)
- IT Polyolefin fibers
RL: PEP (Physical, engineering or chemical process); RCT (Reactant); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); PROC (Process); RACT (Reactant or reagent); USES (Uses)
(ethylene; hemofilters comprising a cyclodextrin covalently bound solid support for blood detoxification)
- IT Blood
Crosslinking agents
Ultrafiltration
(hemofilters comprising a cyclodextrin covalently bound solid support for blood detoxification)
- IT Barbiturates
Lipopolysaccharides
RL: ADV (Adverse effect, including toxicity); REM (Removal or disposal); BIOL (Biological study); PROC (Process)
(hemofilters comprising a cyclodextrin covalently bound solid support for blood detoxification)
- IT Acetate fibers, biological studies
Polyester fibers, biological studies
Polypropene fibers, biological studies
RL: PEP (Physical, engineering or chemical process); RCT (Reactant); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); PROC (Process); RACT (Reactant or reagent); USES (Uses)
(hemofilters comprising a cyclodextrin covalently bound solid support for blood detoxification)
- IT Membrane filters
(hemofiltration; hemofilters comprising a cyclodextrin covalently bound solid support for blood detoxification)
- IT 9002-88-4, Polyethylene 9004-34-6, Cellulose, biological studies
25085-53-4

RL: PEP (Physical, engineering or chemical process); RCT (Reactant); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); PROC (Process); RACT (Reactant or reagent); USES (Uses)

(fibers; hemofilters comprising a cyclodextrin covalently bound solid support for blood detoxification)

IT 7585-39-9, β -Cyclodextrin 7631-86-9, Silica, biological studies 9002-98-6, Polyethylenimine 10016-20-3, α -Cyclodextrin 12619-70-4, Cyclodextrin 17465-86-0, γ -Cyclodextrin
 RL: PEP (Physical, engineering or chemical process); RCT (Reactant); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); PROC (Process); RACT (Reactant or reagent); USES (Uses)

(hemofilters comprising a cyclodextrin covalently bound solid support for blood detoxification)

IT 79-06-1, Acrylamide, biological studies 79-10-7, Acrylic acid, biological studies 88-12-0, biological studies 106-91-2, Glycidyl methacrylate
 RL: PEP (Physical, engineering or chemical process); RCT (Reactant); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); PROC (Process); RACT (Reactant or reagent); USES (Uses)

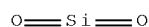
(linker; hemofilters comprising a cyclodextrin covalently bound solid support for blood detoxification)

IT 7631-86-9, Silica, biological studies
 RL: PEP (Physical, engineering or chemical process); RCT (Reactant); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); PROC (Process); RACT (Reactant or reagent); USES (Uses)

(hemofilters comprising a cyclodextrin covalently bound solid support for blood detoxification)

RN 7631-86-9 CAPLUS

CN Silica (CA INDEX NAME)



IT 79-06-1, Acrylamide, biological studies
 RL: PEP (Physical, engineering or chemical process); RCT (Reactant); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); PROC (Process); RACT (Reactant or reagent); USES (Uses)

(linker; hemofilters comprising a cyclodextrin covalently bound solid support for blood detoxification)

RN 79-06-1 CAPLUS

CN 2-Propenamide (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: 2007:87127 CAPLUS Full-text
 DOCUMENT NUMBER: 146:178375
 TITLE: Preparation of single-stranded templates for nucleic acid sequencing
 INVENTOR(S): Liu, Xiaohai; Milton, John; Smith, Geoffrey Paul; Barnes, Colin; Rasolonjatovo, Isabelle Marie Julia; Rigatti, Roberto; Wu, Xiaolin; Ost, Tobias William Barr; Worsley, Graham John; Earnshaw, David James; Turcatti, Gerardo; Romieu, Anthony
 PATENT ASSIGNEE(S): Solexa Limited, UK
 SOURCE: PCT Int. Appl., 99pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007010251	A2	20070125	WO 2006-GB2687	20060720
WO 2007010251	A3	20070830		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA			

PRIORITY APPLN. INFO.: GB 2005-14936 A 20050720
 AB Single-stranded templates for a nucleic acid sequencing reaction are generated by (1) providing at least one double-stranded nucleic acid mol., wherein both strands of the double-stranded nucleic acid mol. are attached to a solid support at the 5' end, (2) cleaving one or both strands of the double-stranded nucleic acid mol., and (3) subjecting the cleaved strand(s) to denaturing conditions to remove the portion of the cleaved strand(s) not attached to the solid support. Thereby, a partially or substantially single-stranded template is generated for a nucleic acid sequencing reaction. Clustered arrays may be formed on such solid-supported hydrogels by solid-phase nucleic acid amplification using forward and reverse amplification primers attached to the hydrogel at their 5' ends, leading to the production of clustered arrays of amplification products having a "bridged" structure. The method removes immobilized strands in these "bridged" structure, which are inefficient templates for sequencing. The "linearization" method does not require cleavage with restriction endonucleases or nicking endonucleases, and is compatible with arrays formed on solid supported polyacrylamide hydrogels. The invention also provides syntheses for acrylamide-based coating of Silex flow cells (i.e., the solid support).
 CC 3-1 (Biochemical Genetics)
 Section cross-reference(s): 35
 IT Bond cleavage
 (of 5'-immobilized nucleic acids from acrylamide-coated solid support; preparation of single-stranded templates for nucleic acid sequencing)
 IT Photolysis
 (photochem. bond cleavage, of 5'-immobilized nucleic acids from

acrylamide-coated solid support; preparation of single-stranded templates for nucleic acid sequencing)

IT Bond cleavage
(photochem., of 5'-immobilized nucleic acids from acrylamide-coated solid support; preparation of single-stranded templates for nucleic acid sequencing)

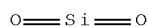
IT Nucleic acid amplification
PCR (polymerase chain reaction)
(solid-phase, linearization of bridged structures formed by; preparation of single-stranded templates for nucleic acid sequencing)

IT 7631-86-9, Silex, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(acrylamide-coated; preparation of single-stranded templates for nucleic acid sequencing)

IT 79-06-1D, Acrylamide, copolymers containing 79-39-0D, Methacrylamide, copolymers containing 88-12-0D, copolymers containing 868-77-9D, copolymers containing 9003-05-8, Acrylamide polymers
RL: TEM (Technical or engineered material use); USES (Uses)
(solid supported; preparation of single-stranded templates for nucleic acid sequencing)

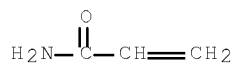
IT 7631-86-9, Silex, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(acrylamide-coated; preparation of single-stranded templates for nucleic acid sequencing)

RN 7631-86-9 CAPLUS
CN Silica (CA INDEX NAME)



IT 79-06-1D, Acrylamide, copolymers containing
RL: TEM (Technical or engineered material use); USES (Uses)
(solid supported; preparation of single-stranded templates for nucleic acid sequencing)

RN 79-06-1 CAPLUS
CN 2-Propenamide (CA INDEX NAME)



L46 ANSWER 9 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2006:1173779 CAPLUS Full-text
 DOCUMENT NUMBER: 145:485404
 TITLE: Structure for separation of physiologically active agent and method for recovering physiologically active agent
 INVENTOR(S): Nakahama, Kazumichi
 PATENT ASSIGNEE(S): Canon Kabushiki Kaisha, Japan
 SOURCE: U.S. Pat. Appl. Publ., 11pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2006251610	A1	20061109	US 2006-412866	20060428
JP 2006312117	A	20061116	JP 2005-134985	20050506
PRIORITY APPLN. INFO.:			JP 2005-134985	A 20050506

AB The present invention is directed to sep. a physiol. active agent accurately. Then, the present invention provides a structure for separation of a physiol. active agent, comprising a substrate, a substance exhibiting affinity for the physiol. active agent, and a block polymer composed of a segment having a lower critical solution temperature (LCST) and a hydrophilic segment, in which the substance exhibiting affinity and the block polymer are bound to the substrate. The carboxylated block polymer, poly(EO-b-NIPAM)-COOH, was prepared and reacted with N-hydroxyl succinimide and then with aminopropyl silica beads. The polymer-modified beads were reacted with polyethylene glycol glycidyl ether and CuCl₂ to form beads with a block polymer and affinity agent. The beads were dispersed in distilled water at 40° and bovine serum albumin (BSA) was added. The beads with adsorbed BSA were centrifuged. BSA was released from the beads by lowering the temperature to 25° and centrifuging to remove the beads.

INCL 424078300; 435006000

CC 9-1 (Biochemical Methods)

IT Immobilization, molecular or cellular
(of block polymer and affinity agent; structure having affinity substance and block polymer bound to substrate for separation and recovery of physiol. active agent)

IT 7631-86-9DP, Silica, reaction products with affinity agent and block polymer

RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); DEV (Device component use); NUU (Other use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(beads; structure having affinity substance and block polymer bound to substrate for separation and recovery of physiol. active agent)

IT 7631-86-9, Silica, reactions

RL: RCT (Reactant); RACT (Reactant or reagent)

(beads; structure having affinity substance and block polymer bound to substrate for separation and recovery of physiol. active agent)

IT 79-06-1, Acrylamide, reactions 2210-25-5, NIPAM 3052-61-7, Benzyl N,N-diethyl dithiocarbamate 6066-82-6, N-Hydroxy succinimide

RL: RCT (Reactant); RACT (Reactant or reagent)

(structure having affinity substance and block polymer bound to substrate for separation and recovery of physiol. active agent)

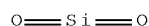
IT 7631-86-9DP, Silica, reaction products with affinity agent and block polymer

RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); DEV (Device component use); NUU (Other use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

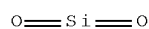
(beads; structure having affinity substance and block polymer bound to substrate for separation and recovery of physiol. active agent)

RN 7631-86-9 CAPLUS

CN Silica (CA INDEX NAME)



IT 7631-86-9, Silica, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (beads; structure having affinity substance and block polymer bound to
 substrate for separation and recovery of physiol. active agent)
 RN 7631-86-9 CAPLUS
 CN Silica (CA INDEX NAME)



IT 79-06-1, Acrylamide, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (structure having affinity substance and block polymer bound to
 substrate for separation and recovery of physiol. active agent)
 RN 79-06-1 CAPLUS
 CN 2-Propenamide (CA INDEX NAME)



L46 ANSWER 10 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2006:992741 CAPLUS Full-text
 DOCUMENT NUMBER: 146:18926
 TITLE: HILIC mode separation of polar compounds by monolithic
 silica capillary columns coated with polyacrylamide
 AUTHOR(S): Ikegami, Tohru; Fujita, Hiroshi; Horie, Kanta; Hosoya,
 Ken; Tanaka, Nobuo
 CORPORATE SOURCE: Department of Polymer Science and Engineering, Kyoto
 Institute of Technology, Matsugasaki, Sakyo-ku, Kyoto,
 606-8585, Japan
 SOURCE: Analytical and Bioanalytical Chemistry (2006), 386(3),
 578-585
 CODEN: ABCNBP; ISSN: 1618-2642
 PUBLISHER: Springer
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB HILIC (hydrophilic interaction liquid chromatog.) mode columns were prepared
 by an on-column polymerization of acrylamide on a monolithic silica capillary
 column modified with N-(3-trimethoxysilylpropyl)methacrylamide as the anchor
 group. The products showed HILIC mode retention characteristics with three
 times greater permeability and slightly higher column efficiency compared to a
 com. available amide-type HILIC column packed with 5- μm particles. The
 selectivity of the monolithic silica-based column was similar to that of the
 particulate column for each group of solutes towards nucleosides, nucleic
 bases and carbohydrate derivs., although a considerable difference was
 observed in the selectivity for the solute groups. Although the retention of
 solutes based on the polar functionality was much smaller with the monolithic
 silica columns, which had a smaller phase ratio, than with the particle-packed
 column, the former can achieve better separation using the high permeability
 and higher column efficiencies of a longer column.
 CC 80-4 (Organic Analytical Chemistry)
 IT HPLC stationary phases
 (hydrophilic interaction liquid chromatog. separation of polar compds. by

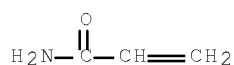
monolithic silica capillary columns coated with polyacrylamide)

IT 79-06-1, Acrylamide, analysis 681-84-5, Tetramethoxysilane
919-30-2, 3-Aminopropyltriethoxysilane 7631-86-9, Silica,
analysis
RL: ARU (Analytical role, unclassified); RCT (Reactant); ANST (Analytical
study); RACT (Reactant or reagent)
(hydrophilic interaction liquid chromatog. separation of polar compds. by
monolithic silica capillary columns coated with polyacrylamide)

IT 79-06-1, Acrylamide, analysis 7631-86-9, Silica,
analysis
RL: ARU (Analytical role, unclassified); RCT (Reactant); ANST (Analytical
study); RACT (Reactant or reagent)
(hydrophilic interaction liquid chromatog. separation of polar compds. by
monolithic silica capillary columns coated with polyacrylamide)

RN 79-06-1 CAPLUS

CN 2-Propenamide (CA INDEX NAME)



RN 7631-86-9 CAPLUS

CN Silica (CA INDEX NAME)



REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 11 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:817623 CAPLUS Full-text

DOCUMENT NUMBER: 145:244534

TITLE: Method for the photochemical attachment of
biomolecules to a substrate

INVENTOR(S): Balakirev, Maxime; Sudor, Jan; Chatelain, Francois;
Coqueret, Xavier

PATENT ASSIGNEE(S): Commissariat A L'Energie Atomique, Fr.

SOURCE: PCT Int. Appl., 41pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
WO 2006084482	A1	20060817	WO 2005-EP2366	20050210
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,			
	CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,			
	GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,			
	LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,			
	NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM,			
	SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,			
	IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF,			

CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM,
 KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG,
 KZ, MD, RU, TJ, TM

AU 2005327004 A1 20060817 AU 2005-327004 20050210
 CA 2596807 A1 20060817 CA 2005-2596807 20050210
 EP 1846759 A1 20071024 EP 2005-715781 20050210

R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
 IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR

PRIORITY APPLN. INFO.: WO 2005-EP2366 A 20050210

AB Methods and devices for attaching biomols. to a solid substrate surface for example to the inner surface of a capillary. In particular, the invention relates to compds. and methods for creating patterned arrays of biomols. inside fused silica capillaries so that a plurality of bioassays can be conducted simultaneously. The method for the grafting of a mol. to a solid substrate where the solid substrate comprises a layer of a linker that has a resistance to the adsorption of the mol., comprises: (a) contacting the solid substrate with a solution wherein the mol. to be grafted and a photosensitizer are solubilized; (b) photo-irradiating at least one part of the solid substrate. Mols. are selected from the list consisting of proteins, nucleic acids and their analogs, sugars, lipids, steroids, enzymes, peptides, glycoproteins. The substrates are glass, silicon, fused silica, polymers, metals, metal oxides and ceramics.

IC ICM G01N033-543

ICS C12Q001-68; C08J007-10

CC 9-16 (Biochemical Methods)

IT Capillary tubes

Cathode ray tubes

Ceramics

Electroluminescent devices

Fluorescence microscopy

Fluorometry

Immobilization, molecular or cellular

Laboratory ware

Lasers

Mass spectrometry

Microarray technology

Microscopes

Photochemistry

Photodiodes

Radiochemical analysis

Solubilization

Surface plasmon resonance

UV radiation

(method for photochem. attachment of biomols. to a substrate)

IT 79-06-1D, Acrylamide, polymer 5205-93-6D, N-[(3-Dimethylamino)propyl]methacrylamide, polymer 7440-21-3, Silicon, uses 7631-86-9, Silica, uses 9003-11-6 30347-69-4 86742-39-4D, N-(3-Aminopropyl)methacrylamide, polymer

RL: DEV (Device component use); USES (Uses)

(method for photochem. attachment of biomols. to a substrate)

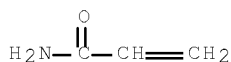
IT 79-06-1D, Acrylamide, polymer 7631-86-9, Silica, uses

RL: DEV (Device component use); USES (Uses)

(method for photochem. attachment of biomols. to a substrate)

RN 79-06-1 CAPLUS

CN 2-Propenamide (CA INDEX NAME)



RN 7631-86-9 CAPLUS
CN Silica (CA INDEX NAME)

O==Si==O

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 12 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:470318 CAPLUS Full-text
DOCUMENT NUMBER: 144:463761
TITLE: Device and method for purification of biological
materials in the presence of insoluble matter using
solid phase capturing and filtration
INVENTOR(S): Ekenberg, Steven J.; Wood, Keith V.; Engel, Laurie
PATENT ASSIGNEE(S): Promega Corp., USA
SOURCE: PCT Int. Appl., 59 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006053187	A2	20060518	WO 2005-US40878	20051109
WO 2006053187	A3	20061207		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
US 2006105349	A1	20060518	US 2004-987514	20041112
EP 1815226	A2	20070808	EP 2005-851531	20051109
R:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU			
US 2006281124	A1	20061214	US 2006-466945	20060824
PRIORITY APPLN. INFO.:			US 2004-987514	A 20041112
			WO 2005-US40878	W 20051109

AB An apparatus, method and kit for isolating a biomol. from a sample. The sample comprises a complex biol. material, which includes insol. matter. Some embodiments of the apparatus and kit include a reservoir and means for capturing the biomol. either contained within or coupled to the reservoir. The reservoir can have an inner surface, and can be adapted to contain the sample. The apparatus can further include least one of a filter positioned between the means for capturing the biomol. and at least a portion of the inner surface of the reservoir, and an aperture defined in the inner surface of the reservoir.

Some embodiments of the method include combining the sample. with a solid phase that is adapted to capture the biomol., removing the insol. matter from the sample, and removing the biomol. from the solid phase.

- CC 9-1 (Biochemical Methods)
Section cross-reference(s): 11, 17, 19, 61
- IT Fusion proteins (chimeric proteins)
RL: ANT (Analyte); PUR (Purification or recovery); ANST (Analytical study); PREP (Preparation)
(GST-containing; device and method for purification of biol. materials in presence of insol. matter using solid phase capturing and filtration)
- IT Proteins
RL: ANT (Analyte); PUR (Purification or recovery); ANST (Analytical study); PREP (Preparation)
(His-tagged; device and method for purification of biol. materials in presence of insol. matter using solid phase capturing and filtration)
- IT Affinity chromatography
(IMAC; device and method for purification of biol. materials in presence of insol. matter using solid phase capturing and filtration)
- IT Analytical apparatus
(automated; device and method for purification of biol. materials in presence of insol. matter using solid phase capturing and filtration)
- IT Biochemical compounds
RL: ANT (Analyte); PUR (Purification or recovery); ANST (Analytical study); PREP (Preparation)
(biotin-tagged; device and method for purification of biol. materials in presence of insol. matter using solid phase capturing and filtration)
- IT Liquid chromatographic stationary phases
in (capillary columns; device and method for purification of biol. materials in presence of insol. matter using solid phase capturing and filtration)
- IT Liquid chromatography
(capillary; device and method for purification of biol. materials in presence of insol. matter using solid phase capturing and filtration)
- IT Separation
(decantation; device and method for purification of biol. materials in presence of insol. matter using solid phase capturing and filtration)
- IT Analytical apparatus
Animal cell line
Anion exchangers
Blood analysis
Cation exchangers
Centrifugation
Cytolysis
Feces
Filters
Filtration
Food analysis
Latex
Microtiter plates
Plant analysis
Pore size
Soil analysis

Solubility
 Urine analysis
 Viscosity
 Waters

(device and method for purification of biol. materials in presence of insol.

matter using solid phase capturing and filtration)

IT Antibodies and Immunoglobulins

Antigens

RL: ANT (Analyte); ARU (Analytical role, unclassified); NUU (Other use, unclassified); PUR (Purification or recovery); ANST (Analytical study); PREP (Preparation); USES (Uses)

(device and method for purification of biol. materials in presence of

insol.

matter using solid phase capturing and filtration)

IT Amino acids, analysis

Carbohydrates, analysis

DNA

Lipids, analysis

Nucleic acids

Peptides, analysis

Phospholipids, analysis

Polynucleotides

Polysaccharides, analysis

RNA

mRNA

RL: ANT (Analyte); PUR (Purification or recovery); ANST (Analytical study); PREP (Preparation)

(device and method for purification of biol. materials in presence of

insol.

matter using solid phase capturing and filtration)

IT Metals, analysis

RL: ARU (Analytical role, unclassified); NUU (Other use, unclassified); ANST (Analytical study); USES (Uses)

(device and method for purification of biol. materials in presence of

insol.

matter using solid phase capturing and filtration)

IT Probes (nucleic acid)

RL: ARU (Analytical role, unclassified); NUU (Other use, unclassified); ANST (Analytical study); USES (Uses)

(device and method for purification of biol. materials in presence of

insol.

matter using solid phase capturing and filtration)

IT Cell

(lysate; device and method for purification of biol. materials in presence of insol. matter using solid phase capturing and filtration)

IT Extraction

(solid-phase; device and method for purification of biol. materials in presence of insol. matter using solid phase capturing and filtration)

IT Pipets

(tips; device and method for purification of biol. materials in presence of insol. matter using solid phase capturing and filtration)

IT Filtration

(vacuum filtration; device and method for purification of biol. materials

in

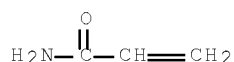
presence of insol. matter using solid phase capturing and filtration)

IT 58-85-5DP, Biotin, tagged on biomols.
 RL: ANT (Analyte); PUR (Purification or recovery); ANST (Analytical study); PREP (Preparation)
 (device and method for purification of biol. materials in presence of insol. matter using solid phase capturing and filtration)

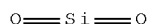
IT 70-18-8, Glutathione, analysis 79-06-1, Acrylamide, analysis 7631-86-9, Silica, analysis 9012-36-6, Agarose 146183-25-7
 RL: ARU (Analytical role, unclassified); NUU (Other use, unclassified); ANST (Analytical study); USES (Uses)
 (device and method for purification of biol. materials in presence of insol. matter using solid phase capturing and filtration)

IT 79-06-1, Acrylamide, analysis 7631-86-9, Silica, analysis
 RL: ARU (Analytical role, unclassified); NUU (Other use, unclassified); ANST (Analytical study); USES (Uses)
 (device and method for purification of biol. materials in presence of insol. matter using solid phase capturing and filtration)

RN 79-06-1 CAPLUS
 CN 2-Propenamide (CA INDEX NAME)



RN 7631-86-9 CAPLUS
 CN Silica (CA INDEX NAME)

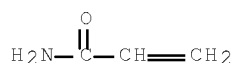


L46 ANSWER 13 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2006:338272 CAPLUS Full-text
 DOCUMENT NUMBER: 144:385780
 TITLE: Methods and compositions for the detection of biological molecules using a two particle complex
 INVENTOR(S): Bard, Allen J.; Miao, Wujian
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 41 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

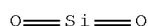
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 2006078912	A1	20060413	US 2005-159412	20050623
AU 2005326758	A1	20060810	AU 2005-326758	20050623
CA 2571283	A1	20060810	CA 2005-2571283	20050623
WO 2006083305	A2	20060810	WO 2005-US22388	20050623
WO 2006083305	A3	20070405		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,

CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
 GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ,
 LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA,
 NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,
 SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,
 ZA, ZM, ZW
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
 IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF,
 CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM,
 KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG,
 KZ, MD, RU, TJ, TM, AP, EA, EP, OA
 EP 1787124 A2 20070523 EP 2005-856844 20050623
 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
 IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA,
 HR, LV, MK, YU
 CN 101057145 A 20071017 CN 2005-80028420 20050623
 JP 2008504528 T 20080214 JP 2007-518295 20050623
 IN 2007KN00140 A 20070629 IN 2007-KN140 20070111
 KR 2007049631 A 20070511 KR 2007-701519 20070122
 PRIORITY APPLN. INFO.: US 2004-581719P P 20040623
 WO 2005-US22388 W 20050623
 AB The invention provides methods of detecting analytes of interest in a sample
 using electrogenerated chemiluminescence. The invention also provides compns.
 comprising at least one solid support that entraps or contains an
 electrogenerated chemiluminescent moiety.
 INCL 435006000; 435007100; 530391100; 536024300
 CC 9-5 (Biochemical Methods)
 Section cross-reference(s): 3
 IT Chemiluminescent substances
 Fluorometry
 Gels
 Immobilization, molecular or cellular
 Immunoassay
 Liposomes
 Membranes, nonbiological
 Micelles
 Nucleic acid hybridization
 (methods and compns. for detection of biol. mols. using a two particle
 complex)
 IT 79-06-1, Acrylamide, analysis 1398-61-4, Chitin
 7631-86-9, Silica, analysis 9003-07-0, Polypropylene
 9003-53-6, Polystyrene 9004-32-4, Carboxymethylcellulose sodium
 9004-54-0, Dextran, analysis 9004-61-9, Hyaluronic acid 9004-70-0,
 Nitrocellulose 9012-36-6, Agarose 9014-76-0, Sephadex 24937-79-9,
 PVDF 71010-52-1D, Gellan, acyl derivs. 104357-56-4
 RL: ARU (Analytical role, unclassified); DEV (Device component use); ANST
 (Analytical study); USES (Uses)
 (methods and compns. for detection of biol. mols. using a two particle
 complex)
 IT 79-06-1, Acrylamide, analysis 7631-86-9, Silica,
 analysis
 RL: ARU (Analytical role, unclassified); DEV (Device component use); ANST
 (Analytical study); USES (Uses)
 (methods and compns. for detection of biol. mols. using a two particle
 complex)
 RN 79-06-1 CAPLUS
 CN 2-Propenamide (CA INDEX NAME)



RN 7631-86-9 CAPLUS
CN Silica (CA INDEX NAME)



L46 ANSWER 14 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:37215 CAPLUS Full-text
DOCUMENT NUMBER: 144:114643
TITLE: Antimicrobial surfaces prepared using atom transfer
radical polymerization
INVENTOR(S): Russell, Alan J.; Koepsel, Richard; Lee, Sang Boem;
Matyjaszewski, Krzysztof
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 19 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2006008490	A1	20060112	US 2004-887029	20040707
PRIORITY APPLN. INFO.:			US 2004-887029	20040707

AB The present invention relates to biocidal articles comprising a plurality of polymers having biocidally active groups. The polymers are attached to a surface and may have a polydispersity less than 3. The biocidally active groups may comprise at least one of a quaternary ammonium salt, a quaternary phosphonium salt or a chloramine. The attached polymers may be any microstructure, topol. or composition, such as, a homopolymer, block copolymer, multiblock copolymer, a random copolymer, graft polymer, a branched or a hyperbranched polymer, and a gradient copolymer. The present invention also comprises a process for the preparation of a biocidal article. Embodiments of the process comprise polymerizing radically polymerizable monomers from an initiator attached to a surface, wherein at least a portion of the monomers comprise a group capable of being converted to a biocidally active group, and converting the group to the biocidally active group. Thus, 2-bromoisobutyryl bromide atom transfer radical polymerization initiator was immobilized on filter paper and then treated with the reaction mixture containing 5 g of 2-(dimethylamino)ethyl methacrylate (DMAEMA), 0.035 g of CuBr, 0.070 g of 2,2'-bipyridine and 5 g of 1,2-dichlorobenzene. The polymerization was carried out at 80° for 48 h, followed by quaternization with 5 mL of Et bromide.

INCL 424402000
CC 63-8 (Pharmaceuticals)
Section cross-reference(s): 10, 37
IT Antimicrobial agents
Biocides
Coating materials
Cotton fibers
Filter paper

Immobilization, molecular or cellular
 Ion exchangers
 Paper
 Porcelain
 Surface
 Wood
 Wool

(antimicrobial surfaces prepared using atom transfer radical polymerization)

IT 79-06-1D, Acrylamide, derivs. 100-43-6, 4-Vinylpyridine
 100-69-6, 2-Vinylpyridine 107-13-1, Acrylonitrile, biological studies
 108-05-4, Vinyl acetate, biological studies 126-98-7, Methacrylonitrile
 868-77-9, 2-Hydroxyethyl methacrylate 1592-20-7, p-Chloromethylstyrene
 2867-47-2, 2-(Dimethylamino)ethyl methacrylate 7429-90-5, Aluminum,
 biological studies 7440-21-3, Silicon, biological studies 7440-57-5,
 Gold, biological studies 7631-86-9, Silica, biological studies
 9002-88-4, Polyethylene 9003-07-0, Polypropylene 9003-53-6,
 Polystyrene 9004-34-6, Cellulose, biological studies 10043-37-5,
 N-Acryloylpiperidine 12597-69-2, Steel, biological studies 42104-70-1,
 N-Acryloylpyrrolidine
 RL: CPS (Chemical process); PEP (Physical, engineering or chemical
 process); THU (Therapeutic use); BIOL (Biological study); PROC (Process);
 USES (Uses)

(antimicrobial surfaces prepared using atom transfer radical polymerization)

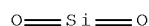
IT 79-06-1D, Acrylamide, derivs. 7631-86-9, Silica,
 biological studies
 RL: CPS (Chemical process); PEP (Physical, engineering or chemical
 process); THU (Therapeutic use); BIOL (Biological study); PROC (Process);
 USES (Uses)

(antimicrobial surfaces prepared using atom transfer radical polymerization)

RN 79-06-1 CAPLUS
 CN 2-Propenamide (CA INDEX NAME)



RN 7631-86-9 CAPLUS
 CN Silica (CA INDEX NAME)



L46 ANSWER 15 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2005:1259551 CAPLUS Full-text
 DOCUMENT NUMBER: 144:19169
 TITLE: Surface acoustic wave sensor comprising a hydrogel
 INVENTOR(S): Warthoe, Peter; Soerensen, Iben
 PATENT ASSIGNEE(S): Atonomics A/S, Den.
 SOURCE: PCT Int. Appl., 126 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005114166	A1	20051201	WO 2005-DK334	20050520
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2005245996	A1	20051201	AU 2005-245996	20050520
CA 2566962	A1	20051201	CA 2005-2566962	20050520
US 2006024813	A1	20060202	US 2005-134821	20050520
EP 1756562	A1	20070228	EP 2005-741788	20050520
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR				
EP 1804059	A2	20070704	EP 2007-6848	20050520
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, LV, MK, YU				
JP 2007538236	T	20071227	JP 2007-516969	20050520
PRIORITY APPLN. INFO.:			DK 2004-802	A 20040521
			EP 2005-741788	A3 20050520
			WO 2005-DK334	W 20050520
AB	The present invention relates generally to methods and compns. for analyzing test samples containing target analytes including proteins and nucleic acids. The invention uses a surface acoustic wave sensor in combination with a hydrogel to obtain an ultra sensitive non-fluorescent detection system.			
IC	ICM G01N029-02			
CC	9-1 (Biochemical Methods)			
IT	Biosensors Blood analysis Blood plasma Blood serum Chelating agents Crosslinking agents Eukaryota Gas analysis Hydrogels Immobilization, molecular or cellular Microsensors Molecular recognition Polymerization catalysts Prokaryota Silylation Surface acoustic wave sensors Urine analysis (methods and compns. for analyzing test samples containing target analytes including proteins and nucleic acids with hydrogel based surface acoustic wave sensor)			
IT	71-43-2, Benzene, uses 74-85-1, Ethylene, uses 75-01-4, Vinyl chloride, uses 75-21-8, Ethylene oxide, uses 79-06-1,			

Acrylamide, uses 88-12-0, uses 100-42-5, Styrene, uses 107-21-1,
 Ethylene glycol, uses 108-05-4, Vinyl acetate, uses 109-93-3, Vinyl
 ether 110-16-7, 2-Butenedioic acid (2Z)-, uses 110-26-9,
 N,N'-Methylenebisacrylamide 132-64-9, Dibenzofuran 132-65-0,
 Dibenzothiophene 1344-28-1, Alumina, uses 4151-45-5, Cinnamate, uses
 7631-86-9, Silicon dioxide, uses 9002-84-0,
 Polytetrafluoroethylene 9002-86-2, Polyvinyl chloride 9003-53-6,
 Polystyrene 9011-14-7, Polymethylmethacrylate 10344-93-1, Acrylate,
 uses 18358-13-9, Methacrylate, uses 24937-79-9, Poly(vinylidene
 fluoride) 25014-41-9, Polyacrylonitrile 25189-55-3, Poly
 N-isopropylacrylamide 25721-76-0, Polyethyleneglycoldimethacrylate
 25852-47-5, Polyethyleneglycoldimethacrylate 26570-48-9,
 Polyethyleneglycoldiacrylate 142862-15-5 870245-59-3

RL: DEV (Device component use); USES (Uses)

(hydrogel component; methods and compns. for analyzing test samples
 containing target analytes including proteins and nucleic acids with
 hydrogel based surface acoustic wave sensor)

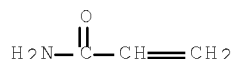
IT 79-06-1, Acrylamide, uses 7631-86-9, Silicon dioxide,
 uses

RL: DEV (Device component use); USES (Uses)

(hydrogel component; methods and compns. for analyzing test samples
 containing target analytes including proteins and nucleic acids with
 hydrogel based surface acoustic wave sensor)

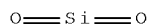
RN 79-06-1 CAPLUS

CN 2-Propenamide (CA INDEX NAME)



RN 7631-86-9 CAPLUS

CN Silica (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 16 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:1178067 CAPLUS Full-text

DOCUMENT NUMBER: 143:417248

TITLE: Process for the reduction of endotoxins in a plasmid
 preparation using a carbohydrate non-ionic detergent
 with silica chromatography

INVENTOR(S): Ray, Kevin Bernard; Kreader, Carol Ann; Chen, Fuqiang;
 Cutter, David Eric

PATENT ASSIGNEE(S): Sigma-Aldrich Co., USA

SOURCE: U.S. Pat. Appl. Publ., 12 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 2005245733	A1	20051103	US 2005-108317	20050418
WO 2005111059	A2	20051124	WO 2005-US13376	20050420
WO 2005111059	A3	20060427		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:

US 2004-565026P P 20040423

AB The present invention provides methods for the reduction of endotoxins in a plasmid preparation using a carbohydrate non-ionic detergent with silica chromatog. Plasmid isolation was performed from Escherichia coli using alkaline lysis, followed by removal of endotoxin contaminants by chromatog. on either an inorg. or organic binding matrix. A wide range of non-ionic detergents were assayed for effective removal of endotoxins from the plasmid preparation. Plasmid yield, endotoxin contamination, and plasmid transfection efficiency in endotoxin-sensitive HuH7 cells were all used to evaluate this invention, as compared to com. endotoxin removal kits.

IC ICM C07H021-04

ICS C12N015-74

INCL 536025400; 435471000

CC 3-1 (Biochemical Genetics)

IT 79-06-1, Acrylic amide, analysis 1306-06-5, Hydroxyapatite
 1314-23-4, Zirconium oxide, analysis 1344-28-1, Aluminum oxide, analysis
 7631-86-9, Silica, analysis 9004-34-6, Cellulose, analysis
 9004-54-0, Dextran, analysis 9012-36-6, Agarose 13463-67-7, Titanium
 oxide, analysis

RL: AMX (Analytical matrix); ANST (Analytical study)

(process for reduction of endotoxins in plasmid preparation using
 carbohydrate
 non-ionic detergent with silica chromatog.)

IT 79-06-1, Acrylic amide, analysis 7631-86-9, Silica,
 analysis

RL: AMX (Analytical matrix); ANST (Analytical study)

(process for reduction of endotoxins in plasmid preparation using
 carbohydrate
 non-ionic detergent with silica chromatog.)

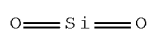
RN 79-06-1 CAPLUS

CN 2-Propenamide (CA INDEX NAME)



RN 7631-86-9 CAPLUS

CN Silica (CA INDEX NAME)



L46 ANSWER 17 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:259501 CAPLUS Full-text

DOCUMENT NUMBER: 142:312684

TITLE: Biological microarray comprising polymer particles and method of use

INVENTOR(S): Leon, Jeffrey W.; Qiao, Tiecheng A.; Landry-Coltrain, Christine J.

PATENT ASSIGNEE(S): Eastman Kodak Company, USA

SOURCE: U.S. Pat. Appl. Publ., 14 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 2005064431	A1	20050324	US 2003-658438	20030909
PRIORITY APPLN. INFO.:			US 2003-658438	20030909

AB The present invention relates to a microarray comprising a support having attached to a surface thereof at least one porous layer, wherein the porous layer comprises a hydrophilic binder and polymer particles. The present invention also relates to a method of using a microarray comprising providing a microarray comprising a support having attached to a surface thereof at least one porous layer, wherein the porous layer comprises a hydrophilic binder and polymer particles; contacting the microarray with biol. targets labeled with optical emission tag; and measuring the signals from the optical emission tag. Polystyrene particles stabilized by vinylsulfone-containing polymers grafted to the surface were prepared by a three-step process. A dispersion of the polymer particles was mixed with a dispersion of Witcobond W-320 and water and the solution was coated and dried on a support of polyethylene resin-coated photog. paper which had been subjected to corona discharge treatment. Goat anti-mouse antibody IgG was spotted onto the polymer particle-coated element and used in a chemiluminescent ELISA for mouse IgG.

IC ICM C12Q001-68

ICS C07H021-04; C12M001-34

INCL 435006000; 435287200; 536024300

CC 9-1 (Biochemical Methods)

Section cross-reference(s): 15, 35

IT Immobilization, molecular or cellular

(of bioaffinity tag to porous layer; biol. microarray comprising porous layer of hydrophilic binder and polymer particles)

IT 7631-86-9, Colloidal silicon dioxide, uses

RL: DEV (Device component use); USES (Uses)

(colloidal, as hydrophilic binder; biol. microarray comprising porous layer of hydrophilic binder and polymer particles)

IT 79-06-1, Acrylamide, uses 88-12-0, uses 288-32-4, Imidazole,

uses 557-75-5, Vinylalcohol, uses 30969-75-6, Oxazoline

RL: DEV (Device component use); USES (Uses)

(copolymers containing, as hydrophilic binder; biol. microarray comprising porous layer of hydrophilic binder and polymer particles)

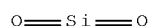
IT 7631-86-9, Colloidal silicon dioxide, uses

RL: DEV (Device component use); USES (Uses)

(colloidal, as hydrophilic binder; biol. microarray comprising porous layer of hydrophilic binder and polymer particles)

RN 7631-86-9 CAPLUS

CN Silica (CA INDEX NAME)



IT 79-06-1, Acrylamide, uses
 RL: DEV (Device component use); USES (Uses)
 (copolymers containing, as hydrophilic binder; biol. microarray comprising
 porous layer of hydrophilic binder and polymer particles)
 RN 79-06-1 CAPLUS
 CN 2-Propenamide (CA INDEX NAME)



L46 ANSWER 18 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2005:121095 CAPLUS Full-text
 DOCUMENT NUMBER: 142:172863
 TITLE: Methods for separating unincorporated
 deoxyribonucleotide triphosphates or salts from DNA or
 purification of other analytes using coated magnetic
 hydroxylapatite beads
 INVENTOR(S): Goldsborough, Andrew
 PATENT ASSIGNEE(S): Cyclops Genome Sciences Limited, UK
 SOURCE: PCT Int. Appl., 42 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005012522	A1	20050210	WO 2004-GB3201	20040723
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1649016	A1	20060426	EP 2004-743533	20040723
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
JP 2006527993	T	20061214	JP 2006-520900	20040723
PRIORITY APPLN. INFO.:				
			GB 2003-17199	A 20030723
			GB 2003-19422	A 20030819
			WO 2004-GB3201	W 20040723

AB The present invention provides a material for separating an analyte from an
 undesired constituent, which material comprises a solid phase and a coating,
 wherein the solid phase is capable of binding the undesired constituent, and

wherein the coating covers the exposed surface of the solid phase to an extent that any binding of the solid phase to the analyte is impeded. In particular, it provides methods for separating unincorporated deoxyribonucleotide triphosphates from DNA or purification of other analytes prior to anal. using coated magnetic hydroxylapatite beads.

- IC ICM C12N015-10
- ICS C12Q001-68; G01N033-50
- CC 9-1 (Biochemical Methods)
- Section cross-reference(s): 3
- IT Acrylic polymers, uses
- Glass, uses
- Metals, uses
- Oxides (inorganic), uses
- Polyamides, uses
- Polycarbonates, uses
- Polyesters, uses
- Polyurethanes, uses
- Rubber, uses
- Salts, uses
- RL: DEV (Device component use); USES (Uses)
- (as solid phase; methods for separating unincorporated
- deoxyribonucleotide triphosphates or salts from DNA or purification of
- other
- analytes using coated magnetic hydroxylapatite beads)
- IT Absorption
- Adsorption
- Affinity
- (coating attached to solid phase by; methods for
- separating unincorporated deoxyribonucleotide triphosphates or salts from
- DNA or purification of other analytes using coated magnetic hydroxylapatite
- beads)
- IT Bond
- (covalent, coating attached to solid phase by;
- methods for separating unincorporated deoxyribonucleotide triphosphates or
- salts from DNA or purification of other analytes using coated magnetic
- hydroxylapatite beads)
- IT Bond
- (hydrophobic, coating attached to solid phase by;
- methods for separating unincorporated deoxyribonucleotide triphosphates or
- salts from DNA or purification of other analytes using coated magnetic
- hydroxylapatite beads)
- IT Bond
- (ionic, coating attached to solid phase by; methods
- for separating unincorporated deoxyribonucleotide triphosphates or salts
- from DNA or purification of other analytes using coated magnetic
- hydroxylapatite beads)
- IT Containers
- Pipes and Tubes
- (solid phase attached to; methods for separating
- unincorporated deoxyribonucleotide triphosphates or salts from DNA or
- purification of other analytes using coated magnetic hydroxylapatite beads)
- IT Chelating agents
- (solid phase binding to; methods for separating
- unincorporated deoxyribonucleotide triphosphates or salts from DNA or
- purification of other analytes using coated magnetic hydroxylapatite beads)
- IT Filters
- Gels
- Liquid chromatography
- Membranes, nonbiological
- Particles

Powders

(solid phase; methods for separating unincorporated deoxyribonucleotide triphosphates or salts from DNA or purification of other

analytes using coated magnetic hydroxylapatite beads)

IT Pipets

(tip, solid phase as lining of; methods for separating unincorporated deoxyribonucleotide triphosphates or salts from DNA or purification of other analytes using coated magnetic hydroxylapatite beads)

IT 79-06-1, Acrylamide, uses 1306-05-4, Fluorapatite 7429-90-5D, Aluminum, salts or oxides 7439-89-6D, Iron, salts or oxides 7439-92-1D, Lead, salts or oxides 7439-93-2D, Lithium, salts or oxides 7439-95-4D, Magnesium, salts or oxides 7439-96-5D, Manganese, salts or oxides 7439-98-7D, Molybdenum, salts or oxides 7440-02-0D, Nickel, salts or oxides 7440-05-3D, Palladium, salts or oxides 7440-06-4D, Platinum, salts or oxides 7440-22-4D, Silver, salts or oxides 7440-31-5D, Tin, salts or oxides 7440-33-7D, Tungsten, salts or oxides 7440-46-2D, Cesium, salts or oxides 7440-47-3D, Chromium, salts or oxides 7440-50-8D, Copper, salts or oxides 7440-55-3D, Gallium, salts or oxides 7440-56-4D, Germanium, salts or oxides 7440-57-5D, Gold, salts or oxides 7440-62-2D, Vanadium, salts or oxides 7440-66-6D, Zinc, salts or oxides 7440-70-2, Calcium, uses 7631-86-9, Silica, uses 7782-49-2D, Selenium, salts or oxides 9002-86-2, Polyvinyl chloride 9002-88-4, Polyethylene 9003-07-0, Polypropylene 9003-53-6, Polystyrene 9004-70-0, Nitrocellulose 9012-36-6, Agarose 14808-60-7, Quartz, uses

RL: DEV (Device component use); USES (Uses)

(as solid phase; methods for separating unincorporated deoxyribonucleotide triphosphates or salts from DNA or purification of

other

analytes using coated magnetic hydroxylapatite beads)

IT 79-06-1, Acrylamide, uses 7631-86-9, Silica, uses

RL: DEV (Device component use); USES (Uses)

(as solid phase; methods for separating unincorporated deoxyribonucleotide triphosphates or salts from DNA or purification of

other

analytes using coated magnetic hydroxylapatite beads)

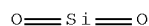
RN 79-06-1 CAPLUS

CN 2-Propenamide (CA INDEX NAME)



RN 7631-86-9 CAPLUS

CN Silica (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 19 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2004:856907 CAPLUS Full-text
 DOCUMENT NUMBER: 141:356031

TITLE: Functionalized nanotubes
 INVENTOR(S): Fischer, Alan; Hoch, Robert; Moy, David; Lu, Ming;
 Martin, Mark; Niu, Chun Ming; Ogata, Naoya; Tennent,
 Howard; Dong, Liwen; Sun, Ji; Helms, Larry; Jameison,
 Fabian; Liang, Pam; Simpson, David
 PATENT ASSIGNEE(S): Hyperion Catalysis International, Inc., USA
 SOURCE: U.S. Pat. Appl. Publ., 50 pp., Cont.-in-part of U.S.
 Ser. No. -594,673.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 5
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004202603	A1	20041014	US 2004-837125	20040430
US 6203814	B1	20010320	US 1994-352400	19941208
US 2006193868	A1	20060831	US 2006-412350	20060426

PRIORITY APPLN. INFO.:

	US 1994-352400	A3	19941208
	US 1996-611368	B1	19960306
	US 1996-37238P	P	19960925
	US 1997-812856	B1	19970306
	US 2000-594673	A2	20000616

AB The invention describes graphitic nanotubes, which includes tubular fullerenes (commonly called "buckytubes") and fibrils, which are functionalized by chemical substitution or by adsorption of functional moieties. More specifically the invention relates to graphitic nanotubes which are uniformly or non-uniformly substituted with chemical moieties or upon which certain cyclic compds. are adsorbed and to complex structures comprised of such functionalized nanotubes linked to one another. The invention also relates to methods for introducing functional groups onto the surface of such nanotubes. The invention further relates to uses for functionalized nanotubes.

IC ICM D01F009-12
ICS C07C063-333

INCL 423447200; 562492000; 564426000

CC 66-4 (Surface Chemistry and Colloids)
Section cross-reference(s): 7

IT Solid phase synthesis
(peptide; surface functionalization of carbon nanotubes and fibrils for substance immobilization)

IT Affinity chromatographic stationary phases
Functional groups
Surface reaction
(surface functionalization of carbon nanotubes and fibrils for enzyme immobilization)

IT 7631-86-9P, Silica, preparation
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of silica-carbon fibril composite)

IT 56-87-1DP, L-Lysine, carbon fibril bonded, preparation 58-85-5DP, Biotin, surface reaction product with carbon fibrils 60-24-2DP, Monothioethylene glycol, surface reaction product with carbon nanotubes and fibrils 75-89-8DP, 2,2,2-Trifluoroethanol, surface reaction product with carbon nanotubes and fibrils 79-06-1DP, 2-Propenamide, surface reaction product with carbon nanotubes and fibrils 79-10-7DP, 2-Propenoic acid, surface reaction product with carbon nanotubes and fibrils 107-02-8DP, Propenal, surface reaction product with carbon nanotubes and fibrils 107-11-9DP, 3-Amino-1-propene, surface reaction product with carbon nanotubes and fibrils 107-13-1DP, 2-Propenenitrile, surface reaction product with carbon nanotubes and fibrils 107-18-6DP,

2-Propen-1-ol, surface reaction product with carbon nanotubes and fibrils
 108-31-6DP, 2,5-Furandione, surface reaction product with carbon nanotubes
 and fibrils 109-72-8DP, Butyllithium, surface reaction product with
 carbon nanotubes and fibrils 110-16-7DP, 2-Butenedioic acid (Z)-,
 surface reaction product with carbon nanotubes and fibrils 111-86-4DP,
 1-Octanamine, surface reaction product with carbon nanotubes and fibrils
 124-30-1DP, 1-Octadecanamine, surface reaction product with carbon
 nanotubes and fibrils 151-50-8DP, Potassium cyanide, surface reaction
 product with carbon nanotubes and fibrils 530-62-1DP, N,N'-Carbonyl
 diimidazole, surface reaction product with carbon nanotubes and fibrils
 593-56-6DP, Methoxyamine hydrochloride, surface reaction product with
 carbon nanotubes and fibrils 814-68-6DP, Propenoyl chloride, surface
 reaction product with carbon nanotubes and fibrils 994-30-9DP,
 Chlorotriethylsilane, surface reaction product with carbon nanotubes and
 fibrils 1310-73-2DP, Sodium hydroxide, surface reaction product with
 carbon nanotubes and fibrils 1333-74-0DP, Hydrogen, surface reaction
 product with carbon nanotubes and fibrils 1336-21-6DP, Ammonium
 hydroxide, surface reaction product with carbon nanotubes and fibrils
 1892-57-5DP, 1-Ethyl-3-(3-dimethylaminopropyl)carbodiimide, surface
 reaction product with carbon nanotubes and fibrils 2016-57-1DP,
 1-Aminodecane, surface reaction product with carbon nanotubes and fibrils
 2074-87-5DP, Cyanogen, surface reaction product with carbon nanotubes and
 fibrils 4048-33-3DP, 6-Aminohexan-1-ol, surface reaction product with
 carbon nanotubes and fibrils 4781-83-3DP, 2-Iminothiolane hydrochloride,
 surface reaction product with carbon nanotubes and fibrils 5591-94-6DP,
 surface reaction product with carbon nanotubes and fibrils 5957-17-5DP,
 Triethyl(2-hydroxyethyl)ammonium iodide, surface reaction product with
 carbon nanotubes and fibrils 7664-41-7DP, Ammonia, surface reaction
 product with carbon nanotubes and fibrils 7664-93-9DP, Sulfuric acid,
 surface reaction product with carbon nanotubes and fibrils 7697-37-2DP,
 Nitric acid, surface reaction product with carbon nanotubes and fibrils
 7704-34-9DP, Sulfur, surface reaction product with carbon nanotubes and
 fibrils 7732-18-5DP, Water, surface reaction product with carbon
 nanotubes and fibrils 7782-44-7DP, Oxygen, surface reaction product with
 carbon nanotubes and fibrils 13214-66-9DP, 4-Phenylbutylamine, surface
 reaction product with carbon nanotubes and fibrils 19008-71-0DP,
 8-Amino-octan-1-ol, surface reaction product with carbon nanotubes and
 fibrils 23160-46-5DP, 10-Aminodecan-1-ol, surface reaction product with
 carbon nanotubes and fibrils 103708-09-4DP, Sulfosuccinimidyl-4-(N-
 maleimidomethyl)cyclohexanecarboxylate, surface reaction product with
 carbon nanotubes and fibrils 142755-63-3DP, 18-Amino-octadecan-1-ol,
 surface reaction product with carbon nanotubes and fibrils

RL: SPN (Synthetic preparation); PREP (Preparation)

(surface functionalization of carbon nanotubes and fibrils for enzyme
 immobilization)

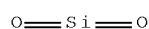
IT 7631-86-9P, Silica, preparation

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of silica-carbon fibril composite)

RN 7631-86-9 CAPLUS

CN Silica (CA INDEX NAME)

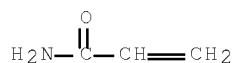


IT 79-06-1DP, 2-Propenamide, surface reaction product with carbon
 nanotubes and fibrils

RL: SPN (Synthetic preparation); PREP (Preparation)

(surface functionalization of carbon nanotubes and fibrils for enzyme

immobilization)
 RN 79-06-1 CAPLUS
 CN 2-Propenamide (CA INDEX NAME)



L46 ANSWER 20 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2003:717247 CAPLUS Full-text
 DOCUMENT NUMBER: 139:210376
 TITLE: Analyte-detection using signal amplification via
 polymerization and application to immunoassays and
 nucleic acid hybridization
 INVENTOR(S): Hanke, Hans-Christian; Martin, Alfred
 PATENT ASSIGNEE(S): Infineon Technologies AG, Germany
 SOURCE: Eur. Pat. Appl., 19 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1343012	A1	20030910	EP 2003-4841	20030305
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
DE 10210224	A1	20030925	DE 2002-10210224	20020308
PRIORITY APPLN. INFO.:			DE 2002-10210224	A 20020308

AB The invention concerns an anal. system containing a detector mol. that binds specifically to the analyte mol. and a catalyst system that binds to the detector mol. directly or is capable to bind to the detector mol. via specific binding; the catalyst system is capable either to promote directly a polymerization or produces a polymerization initiator or a precursor thereof for the production of a polymerizate; the polymerizate is determined by optical, elec. or gravimetric means. Assays based on antibody-antigen binding and nucleic acid hybridization can be performed using the method; analytes or reagents are immobilized to solid phase, e.g. into the wells of microtiterplates. Typical catalyst mols. are oxidases; they can be linked via a spacer to the detector mol.; or the detector mol. is linked to an affinity mol., e.g. biotin and the catalyst is linked to avidin, thus the linkage between detector and catalyst is established via biotin-avidin binding. The anal. system also includes polymerizable compds. for solution, emulsion or suspension polymerization. The invention further relates to a test kit that contains the necessary ingredients.

IC ICM G01N033-58
 ICS C12Q001-26; G01N033-543; G01N033-552
 CC 9-1 (Biochemical Methods)
 IT Affinity
 Electrochemical analysis
 Gravimetric analysis
 Immobilization, molecular or cellular
 Immunoassay
 Microtiter plates
 Nucleic acid hybridization
 Optical detectors

Semiconductor devices

Test kits

(analyte-detection using signal amplification via polymerization and application to immunoassays and nucleic acid hybridization)

IT 79-06-1, Acrylamide, reactions

RL: ARG (Analytical reagent use); RCT (Reactant); ANST (Analytical study); RACT (Reactant or reagent); USES (Uses)

(analyte-detection using signal amplification via polymerization and application to immunoassays and nucleic acid hybridization)

IT 1303-00-0, Gallium arsenide, uses 7440-21-3, Silicon, uses 7440-56-4, Germanium, uses 7631-86-9, Silica, uses 12033-89-5, Silicon nitride, uses

RL: DEV (Device component use); USES (Uses)

(analyte-detection using signal amplification via polymerization and application to immunoassays and nucleic acid hybridization)

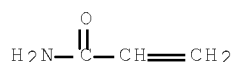
IT 79-06-1, Acrylamide, reactions

RL: ARG (Analytical reagent use); RCT (Reactant); ANST (Analytical study); RACT (Reactant or reagent); USES (Uses)

(analyte-detection using signal amplification via polymerization and application to immunoassays and nucleic acid hybridization)

RN 79-06-1 CAPLUS

CN 2-Propenamide (CA INDEX NAME)



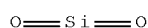
IT 7631-86-9, Silica, uses

RL: DEV (Device component use); USES (Uses)

(analyte-detection using signal amplification via polymerization and application to immunoassays and nucleic acid hybridization)

RN 7631-86-9 CAPLUS

CN Silica (CA INDEX NAME)



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 21 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:222268 CAPLUS Full-text

DOCUMENT NUMBER: 138:251133

TITLE: Particle based homogeneous assays using capillary electrophoresis with laser-induced fluorescence detection

INVENTOR(S): Cheng, Anthony K.; Kim, Julie S.; Oh, Chan S.

PATENT ASSIGNEE(S): Beckman Coulter, Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 18 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 2003054569	A1	20030320	US 2001-947990	20010906
US 7179658	B2	20070220		
WO 2003023353	A2	20030320	WO 2002-US27332	20020827
WO 2003023353	A3	20031231		
W: JP				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR				
EP 1432987	A2	20040630	EP 2002-763547	20020827
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
JP 2005502871	T	20050127	JP 2003-527379	20020827
US 2007259338	A1	20071108	US 2006-611072	20061214
PRIORITY APPLN. INFO.:			US 2001-947990	A 20010906
			WO 2002-US27332	W 20020827

AB The invention provides highly sensitive and rapid homogeneous assays which employ particle-enhanced assay formats in concert with capillary electrophoresis and laser-induced fluorescence (LIF) detection to determine the concentration of an analyte of interest in a sample. Such a determination is made by measuring fluorescent signal(s) (i.e., an electropherogram) produced upon LIF of species present in the reaction mixture that are capable of producing such signals. The method of this invention produces simplified electropherograms by reducing the number of signals that must be separated and subsequently measured, and therefore increases the accuracy of the detection and/or quantification of target analyte concentration in a sample.

IC ICM C12Q001-70

ICS C12Q001-68; G01N033-561

INCL 436516000; X43-5 .5; X43-5 .6

CC 9-16 (Biochemical Methods)

IT Animal cell

Animal tissue

Binders

Blood analysis

Blood plasma

Blood serum

Capillary electrophoresis

Cerebrospinal fluid

Coating materials

Columns and Towers

Concentration (condition)

Erythrocyte

Eubacteria

Fluorescent substances

Food analysis

Immobilization, molecular or cellular

Labels

Laser fluorometry

Liposomes

Milk analysis

Particles

Pesticides

Pharmaceutical analysis

Pollen

Tumor markers

Urine analysis

Virus

Wastes

(particle based homogeneous assays using capillary electrophoresis with laser-induced fluorescence detection)

IT 79-06-1, Acrylamide, analysis 7440-57-5, Colloidal gold,

analysis 7631-86-9, Silica, analysis 9004-34-6, Cellulose,
analysis 9004-54-0, Dextran, analysis 18358-13-9, Methacrylate,
analysis 60676-86-0, Fused silica

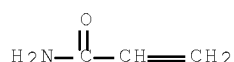
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(particle based homogeneous assays using capillary electrophoresis with
laser-induced fluorescence detection)

IT 79-06-1, Acrylamide, analysis 7631-86-9, Silica,
analysis

RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(particle based homogeneous assays using capillary electrophoresis with
laser-induced fluorescence detection)

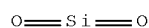
RN 79-06-1 CAPLUS

CN 2-Propenamide (CA INDEX NAME)



RN 7631-86-9 CAPLUS

CN Silica (CA INDEX NAME)



REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 22 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:73771 CAPLUS Full-text

DOCUMENT NUMBER: 139:79654

TITLE: Oligodeoxynucleotide-modified capillary for
electrophoretic separation of single-stranded DNAs
with a single-base difference

AUTHOR(S): Anada, Takahisa; Ogawa, Masako; Yokomizo, Hisashi;
Ozaki, Yoshihisa; Takarada, Tohru; Katayama, Yoshiki;
Maeda, Mizuo

CORPORATE SOURCE: Department of Applied Chemistry, Graduate School of
Engineering, Kyushu University, Fukuoka, 812-8581,
Japan

SOURCE: Analytical Sciences (2003), 19(1), 73-77
CODEN: ANSCEN; ISSN: 0910-6340

PUBLISHER: Japan Society for Analytical Chemistry

DOCUMENT TYPE: Journal

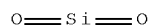
LANGUAGE: English

AB We describe here a method of affinity capillary electrophoresis in which
oligodeoxynucleotide (ODN) was immobilized onto the inner surface of the
capillary. The immobilized ODN functioned successfully as an affinity ligand
for sequence-based DNA separation. Six- or 12-mer ODN with a sequence
complementary to one of the c-K-ras gene was used as an immobilized ligand.
When the 12-mer ODN was used, the detection peak for the complementary ODN
disappeared selectively, while the single-base mutant was detected as usual.
In contrast, when the 6-mer ODN was used as the affinity ligand with a mixture
of the complementary ODN and its single-base mutant, it was possible to detect
both as completely sep. peaks. That is, the separation mode was dependent on
the base number of the immobilized ODN used as an affinity ligand.

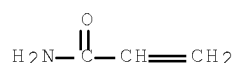
CC 3-1 (Biochemical Genetics)

Section cross-reference(s): 9

- IT Capillary electrophoresis
 Immobilization, molecular or cellular
 (oligodeoxynucleotide-modified capillary for electrophoretic separation of single-stranded DNAs with single-base difference)
- IT 7631-86-9D, Silica, oligodeoxyribonucleotides-immobilized
 RL: ARU (Analytical role, unclassified); ANST (Analytical study)
 (oligodeoxynucleotide-modified capillary for electrophoretic separation of single-stranded DNAs with single-base difference)
- IT 79-06-1, Acrylamide, uses 38862-25-8, Methacryloyloxysuccinimide
 RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
 (use for oligodeoxyribonucleotide-immobilization; oligodeoxynucleotide-modified capillary for electrophoretic separation of single-stranded DNAs with single-base difference)
- IT 7631-86-9D, Silica, oligodeoxyribonucleotides-immobilized
 RL: ARU (Analytical role, unclassified); ANST (Analytical study)
 (oligodeoxynucleotide-modified capillary for electrophoretic separation of single-stranded DNAs with single-base difference)
- RN 7631-86-9 CAPLUS
- CN Silica (CA INDEX NAME)



- IT 79-06-1, Acrylamide, uses
 RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
 (use for oligodeoxyribonucleotide-immobilization; oligodeoxynucleotide-modified capillary for electrophoretic separation of single-stranded DNAs with single-base difference)
- RN 79-06-1 CAPLUS
- CN 2-Propenamide (CA INDEX NAME)



REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 23 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:906328 CAPLUS Full-text

DOCUMENT NUMBER: 138:5635

TITLE: Azlactone-functional reactive hydrophilic coatings and hydrogels and articles comprising coated substrates useful for immobilization of biological materials

INVENTOR(S): Haddad, Louis C.; Hembre, James I.; Rasmussen, Jerald K.; Sarpong, Daniel

PATENT ASSIGNEE(S): 3M Innovative Properties Company, USA

SOURCE: PCT Int. Appl., 30 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2002094890	A1	20021128	WO 2002-US5433	20020222
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2003049435	A1	20030313	US 2001-860944	20010518
US 6794458	B2	20040921		
CA 2445758	A1	20021128	CA 2002-2445758	20020222
AU 2002254016	A1	20021203	AU 2002-254016	20020222
EP 1387857	A1	20040211	EP 2002-723223	20020222
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004535488	T	20041125	JP 2002-592364	20020222
US 2005003198	A1	20050106	US 2004-896664	20040722
US 7101621	B2	20060905		

PRIORITY APPLN. INFO.:

US 2001-860944	A	20010518
WO 2002-US5433	W	20020222

AB Surface coatings from azlactone-functional hydrogels and articles comprising a substrate which is a film, a plate, a particle, a fiber, a column, a bead, a web or a membrane with the coatings disposed thereon are disclosed. Methods of making the coating and controlling the gelation time of the hydrogels by providing a suitable crosslinking agent, e.g. a compound containing primary and secondary amino groups are also disclosed. The coatings have residual azlactone functionality which can be used for covalent attachment (immobilization) of biol. or other functional materials. Thus, a 40% solids Me Et ketone solution of 80:20 weight/weight dimethylacrylamide-vinyl dimethylazlactone copolymer prepared by standard free radical polymerization was diluted to 20% solids with isopropanol, formulated with enough ethylenediamine to provide a crosslink d. of $\approx 10\%$ by weight, then applied to a com. 1536-well plate. Upon drying, a reactive, azlactone-functional polymeric coating was obtained within the wells.

IC ICM C08F008-32

ICS C08F220-56; C08F226-06; C09D133-26; C08J007-12; C08J003-24; C12N011-08; C08K005-17; C08K005-5455; C08L033-26

CC 42-3 (Coatings, Inks, and Related Products)

Section cross-reference(s): 9, 37

IT Hydrogels

Immobilization, molecular or cellular
Microtiter plates

(azlactone-functional reactive hydrophilic coatings and hydrogels and articles comprising coated substrates useful for immobilization of biol. materials)

IT 79-06-1DP, Acrylamide, derivs., polymers with azlactone-derived monomers 79-10-7DP, Acrylic acid, hydroxyalkyl esters, polymers with azlactone-derived monomers 79-39-0DP, Methacrylamide, derivs., polymers with azlactone-derived monomers 79-41-4DP, Methacrylic acid, polymers with azlactone-derived monomers 97-65-4DP, Itaconic acid, polymers with azlactone-derived monomers 100-43-6DP, 4-Vinylpyridine, polymers with azlactone-derived monomers 100-69-6DP, 2-Vinylpyridine, polymers with azlactone-derived monomers 105-16-8DP, 2-Diethylaminoethyl methacrylate, polymers with azlactone-derived monomers 110-16-7DP, Maleic acid, polymers with azlactone-derived monomers 110-17-8DP, Fumaric acid, polymers with azlactone-derived monomers 1121-55-7DP, 3-Vinylpyridine, polymers with azlactone-derived monomers 1746-03-8DP, Vinylphosphonic

acid, polymers with azlactone-derived monomers 2426-54-2DP,
 2-Diethylaminoethyl acrylate, polymers with azlactone-derived monomers
 15214-89-8DP, 2-Acrylamido-2-methyl-1-propanesulfonic acid, polymers with
 azlactone-derived monomers 18526-07-3DP, 3-Dimethylaminopropyl acrylate,
 polymers with azlactone-derived monomers 20602-77-1DP,
 3-Dimethylaminopropyl methacrylate, polymers with azlactone-derived
 monomers 26914-43-2DP, Styrenesulfonic acid, polymers with
 azlactone-derived monomers 36885-49-1DP, polymers with azlactone-derived
 monomers 45021-77-0DP, (3-Acrylamidopropyl)trimethylammonium chloride,
 polymers with azlactone-derived monomers 87328-05-0DP, reaction products
 with crosslinked dimethylacrylamide-vinyldimethylazlactone copolymer
 477273-94-2P 477273-95-3P 477273-96-4P 477273-97-5P 477273-98-6P
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material
 use); PREP (Preparation); USES (Uses)

(azlactone-functional reactive hydrophilic coatings and hydrogels and
 articles comprising coated substrates useful for immobilization of
 biol. materials)

IT 7631-86-9, Silica, uses

RL: TEM (Technical or engineered material use); USES (Uses)

(beads, substrate; azlactone-functional reactive hydrophilic coatings
 and hydrogels and articles comprising coated substrates useful for
 immobilization of biol. materials)

IT 79-06-1DP, Acrylamide, derivs., polymers with azlactone-derived
 monomers

RL: IMF (Industrial manufacture); TEM (Technical or engineered material
 use); PREP (Preparation); USES (Uses)

(azlactone-functional reactive hydrophilic coatings and hydrogels and
 articles comprising coated substrates useful for immobilization of
 biol. materials)

RN 79-06-1 CAPLUS

CN 2-Propenamide (CA INDEX NAME)



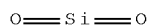
IT 7631-86-9, Silica, uses

RL: TEM (Technical or engineered material use); USES (Uses)

(beads, substrate; azlactone-functional reactive hydrophilic coatings
 and hydrogels and articles comprising coated substrates useful for
 immobilization of biol. materials)

RN 7631-86-9 CAPLUS

CN Silica (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 24 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:869335 CAPLUS Full-text

DOCUMENT NUMBER: 137:362097

TITLE: Chromatography apparatus and methods

INVENTOR(S): Allen, Stephen E.; Dawson, Bruce M.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 5 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
US 2002166816	A1	20021114	US 2001-855155	20010514
PRIORITY APPLN. INFO.:			US 2001-855155	20010514

AB A disposable chromatog. cartridge for separating a chemical contained in a solution, the cartridge including a vessel having an inlet and outlet and a flexible wall that is deformable by externally applied force to reduce a volume within said vessel, and a monolith chromatog. stationary phase inside said vessel. The application of external force and deformation of the flexible wall provides for improved separation of the chemical compound passing through the monolith chromatog. stationary phase. Because the cartridge wall is flexible, it has less expense than a standard column, which results in cost savings when the cartridges are disposed after use, as they typically are when the monolith material is formed in place. Alternatively, when the monolith is preformed, the voids that tend to result next to the chamber wall will be closed during compression, while the voids would not be closed with a standard column. A chromatog. apparatus using such a cartridge and its use in separating a chemical in a solution are disclosed.

IC ICM B01D015-08

INCL 210656000

CC 79-4 (Inorganic Analytical Chemistry)

ST liq chromatog disposable stationary phase cartridge

IT Liquid chromatography

(cartridge, disposable; disclosed chromatog. cartridge having monolithic stationary phase)

IT Acrylic polymers, uses

RL: DEV (Device component use); USES (Uses)

(monolithic chromatog. stationary phase; disclosed chromatog. cartridge having monolithic stationary phase)

IT Chromatographic stationary phases

(monolithic; disclosed chromatog. cartridge having monolithic stationary phase)

IT 79-06-1D, Acrylamide, derivs. 7631-86-9, Silica, uses

9003-70-7, Polystyrene divinylbenzene 9004-34-6, Cellulose, uses

9012-36-6, Agarose

RL: DEV (Device component use); USES (Uses)

(monolithic chromatog. stationary phase; disclosed chromatog. cartridge having monolithic stationary phase)

IT 79-06-1D, Acrylamide, derivs. 7631-86-9, Silica, uses

RL: DEV (Device component use); USES (Uses)

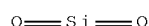
(monolithic chromatog. stationary phase; disclosed chromatog. cartridge having monolithic stationary phase)

RN 79-06-1 CAPLUS

CN 2-Propenamide (CA INDEX NAME)



RN 7631-86-9 CAPLUS
CN Silica (CA INDEX NAME)



L46 ANSWER 25 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2002:531115 CAPLUS Full-text
DOCUMENT NUMBER: 137:90193
TITLE: Enzyme immobilization on inorganic porous material via crosslinking
INVENTOR(S): Akashi, Mitsuru; Suzuki, Kazuya
PATENT ASSIGNEE(S): Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002199878	A	20020716	JP 2000-404912	20001228
PRIORITY APPLN. INFO.:			JP 2000-404912	20001228

AB A method for immobilization of enzymes on organic-inorg. hybrid body by crosslinking an enzyme-containing organic compound inside the pores of inorg. porous material, is disclosed. Immobilization of enzymes on spherical porous silica particles, calcium silicate, calcium carbonate, or calcium phosphate using acrylamide and a crosslinking agent N,N'-methylene bisacrylamide is described. Use of the complex of low temperature melting agarose and silica in liquid chromatog. column is described. Good performance under increasing pressure was observed

IC ICM C12N011-08
ICS C12N011-14

CC 7-7 (Enzymes)
Section cross-reference(s): 9

IT Immobilization, molecular or cellular
(enzyme; enzyme immobilization on inorg. porous material via crosslinking)

IT Liquid chromatographic stationary phases
(use of low temperature melting agarose and silica complex for; enzyme immobilization on inorg. porous material via crosslinking)

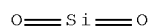
IT 471-34-1, Calcium carbonate, uses 1344-95-2, Calcium silicate
7631-86-9, Silica, uses 10103-46-5, Calcium phosphate
RL: DEV (Device component use); USES (Uses)
(spherical porous particles, enzyme immobilization on; enzyme immobilization on inorg. porous material via crosslinking)

IT 79-06-1, Acrylamide, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(use for crosslinking; enzyme immobilization on inorg. porous material via crosslinking)

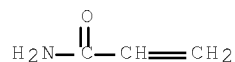
IT 7631-86-9, Silica, uses
RL: DEV (Device component use); USES (Uses)
(spherical porous particles, enzyme immobilization on; enzyme immobilization on inorg. porous material via crosslinking)

RN 7631-86-9 CAPLUS

CN Silica (CA INDEX NAME)



IT 79-06-1, Acrylamide, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (use for crosslinking; enzyme immobilization on inorg. porous material
 via crosslinking)
 RN 79-06-1 CAPLUS
 CN 2-Propenamide (CA INDEX NAME)



L46 ANSWER 26 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2002:391466 CAPLUS Full-text
 DOCUMENT NUMBER: 136:366111
 TITLE: Platelet/leukocyte interaction assay and reagent
 therefor
 INVENTOR(S): Mahan, Donald E.; Stewart, Michael W.
 PATENT ASSIGNEE(S): Pharmanetics Incorporated, USA
 SOURCE: PCT Int. Appl., 39 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002039949	A2	20020523	WO 2001-US42946	20011115
WO 2002039949	A3	20020718		
WO 2002039949	A9	20030206		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 6586259	B1	20030701	US 2000-712165	20001115
CA 2428109	A1	20020523	CA 2001-2428109	20011115
AU 2002033923	A	20020527	AU 2002-33923	20011115
EP 1334363	A2	20030813	EP 2001-984919	20011115
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
BR 2001015396	A	20040203	BR 2001-15396	20011115
JP 2004537029	T	20041209	JP 2002-542324	20011115
MX 2003PA04287	A	20030819	MX 2003-PA4287	20030515
PRIORITY APPLN. INFO.:			US 2000-712165	A 20001115
			US 1999-165462P	P 19991115

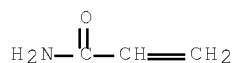
WO 2001-US42946 W 20011115

- AB A platelet/leukocyte interaction assay method and reagent therefor are provided using the presence of a solid-phase stimulus, such as magnetic or non-magnetic particles or mixts. thereof, having bound to the surface thereof one or more ligands that interact directly with platelets, leukocytes or both, for providing a fast, reliable point-of-care assessment of platelet/leukocyte interaction. Citrated whole blood samples of patients undergoing coronary artery bypass graft surgery were tested before and throughout the surgical procedure using von Willebrand factor-coated microspheres and differential cell counts. Platelet/leukocyte complex formation in the presence of the VWF-coated microspheres was noted in the blood samples collected while the patients were on bypass, however platelet/leukocyte complex formation in the presence of the VWF coated microspheres was not seen in blood samples collected 24 h post-surgery, in any of the study subjects.
- IC ICM A61K
- CC 9-2 (Biochemical Methods)
Section cross-reference(s): 14
- IT 79-06-1D, Acrylamide, particles with immobilized ligands interacting with platelets and/or leukocytes 107-13-1D, Acrylonitrile, particles with immobilized ligands interacting with platelets and/or leukocytes 1332-37-2D, Iron oxide, particles with immobilized ligands interacting with platelets and/or leukocytes 7440-05-3D, Palladium, particles with immobilized ligands interacting with platelets and/or leukocytes 7440-06-4D, Platinum, particles with immobilized ligands interacting with platelets and/or leukocytes 7440-57-5D, Gold, particles with immobilized ligands interacting with platelets and/or leukocytes 7631-86-9D, Silica, particles with immobilized ligands interacting with platelets and/or leukocytes 9001-24-5D, Blood-coagulation factor V, immobilized on particles 9001-26-7D, Blood-coagulation factor II, immobilized on particles 9001-27-8D, Blood-coagulation factor VIII, immobilized on particles 9001-28-9D, Blood-coagulation factor IX, immobilized on particles 9001-29-0D, Blood-coagulation factor X, immobilized on particles 9001-30-3D, Blood-coagulation factor XII, immobilized on particles 9002-04-4D, Blood-coagulation factor IIa, immobilized on particles 9002-05-5D, Blood-coagulation factor Xa, immobilized on particles 9002-84-0D, Teflon, particles with immobilized ligands interacting with platelets and/or leukocytes 9003-53-6D, Polystyrene, particles with immobilized ligands interacting with platelets and/or leukocytes 9004-54-0D, Dextran, particles with immobilized ligands interacting with platelets and/or leukocytes 9005-49-6D, Heparin sulfate, immobilized on particles 9007-28-7D, Chondroitin sulfate, immobilized on particles 9012-36-6D, Agarose, particles with immobilized ligands interacting with platelets and/or leukocytes 9013-55-2D, Blood-coagulation factor XI, immobilized on particles 9013-56-3D, Blood-coagulation factor XIII, immobilized on particles 9067-75-8D, Blood-coagulation factor XIIIa, immobilized on particles 37203-61-5D, Blood-coagulation factor XIa, immobilized on particles 37203-62-6D, Blood-coagulation factor XIIa, immobilized on particles 37316-87-3D, Blood-coagulation factor IXa, immobilized on particles 65522-14-7D, Blood-coagulation factor Va, immobilized on particles 72175-66-7D, Blood-coagulation factor VIIa, immobilized on particles
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(platelet/leukocyte interaction assay and reagent)
- IT 79-06-1D, Acrylamide, particles with immobilized ligands interacting with platelets and/or leukocytes 7631-86-9D, Silica, particles with immobilized ligands interacting with platelets and/or leukocytes
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(platelet/leukocyte interaction assay and reagent)

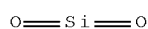
RN 79-06-1 CAPLUS

CN 2-Propenamide (CA INDEX NAME)



RN 7631-86-9 CAPLUS

CN Silica (CA INDEX NAME)



L46 ANSWER 27 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:781254 CAPLUS [Full-text](#)

DOCUMENT NUMBER: 135:315562

TITLE: Protein expression system arrays and use in biological screening

INVENTOR(S): Patron, Andrew; Sawafta, Reyad; Zhou, Bin

PATENT ASSIGNEE(S): Trans Tech Pharma, USA

SOURCE: PCT Int. Appl., 41 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001079849	A2	20011025	WO 2001-US12474	20010417
WO 2001079849	A3	20030814		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 2001041349	A1	20011115	US 2001-836746	20010417
EP 1354037	A2	20031022	EP 2001-928594	20010417
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
PRIORITY APPLN. INFO.:			US 2000-197692P	P 20000417
			WO 2001-US12474	W 20010417

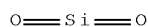
AB The present invention relates to the generation of an array of protein expression systems for parallel in vitro screening of small mol. libraries, protein or peptide libraries, or other protein-binding components. In an aspect, the invention provides a spatially defined array of protein expression systems comprising: (a) a substrate; (b) a binding surface which covers some or all of the substrate surface; and (c) a plurality of discrete protein expression systems arranged in discrete positions on portions of said

substrate covered by said binding surface. Also described are method of using the array for the rapid identification of compds. of able to interact with proteins expressed by any given array.

- IC ICM G01N033-543
 CC 9-1 (Biochemical Methods)
 Section cross-reference(s): 2, 3, 7
 IT Apoptosis
 Biosensors
 Combinatorial library
 Computer application
 Computer program
 DNA formation
 DNA microarray technology
 DNA repair
 Drug screening
 Epitopes
 Films
 Functional groups
 Genetic methods
 Hepatitis C virus
 Hydrogels
 Ion mobility
 Membrane, biological
 PCR (polymerase chain reaction)
 Pathogenic bacteria
 Peptide library
 Solid phase synthesis
 Time-of-flight mass spectrometry
 (protein expression system arrays and use in biol. screening)
 IT Immobilization, biochemical
 (protein; protein expression system arrays and use in biol. screening)
 IT 79-06-1, Acrylamide, uses 1344-28-1, Alumina, uses 7440-21-3,
 Silicon, uses 7631-86-9, Silicon dioxide, uses 9002-88-4,
 Polyethylene 9003-07-0, Polypropylene 9003-53-6, Polystyrene
 13463-67-7, Titania, uses
 RL: ARG (Analytical reagent use); DEV (Device component use); ANST
 (Analytical study); USES (Uses)
 (protein expression system arrays and use in biol. screening)
 IT 79-06-1, Acrylamide, uses 7631-86-9, Silicon dioxide,
 uses
 RL: ARG (Analytical reagent use); DEV (Device component use); ANST
 (Analytical study); USES (Uses)
 (protein expression system arrays and use in biol. screening)
 RN 79-06-1 CAPLUS
 CN 2-Propenamide (CA INDEX NAME)



- RN 7631-86-9 CAPLUS
 CN Silica (CA INDEX NAME)



L46 ANSWER 28 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:677069 CAPLUS Full-text

DOCUMENT NUMBER: 135:238969

TITLE: Preparation and use of carriers coated with polysaccharides

INVENTOR(S): Kirakossian, Hrair; Pease, John S.; Schelp, Carsten; Pirio, Marcel R.; Stohr, Uwe; Wiegand, Andreas

PATENT ASSIGNEE(S): Dade Behring Inc., USA

SOURCE: PCT Int. Appl., 71 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001067105	A1	20010913	WO 2000-US5978	20000306
W: CA, JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2400993	A1	20010913	CA 2000-2400993	20000306
EP 1264181	A1	20021211	EP 2000-919371	20000306
EP 1264181	B1	20070606		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				
JP 2003526786	T	20030909	JP 2001-566027	20000306
ES 2287006	T3	20071216	ES 2000-919371	20000306
US 7179660	B1	20070220	US 2003-220623	20030414
PRIORITY APPLN. INFO.:			EP 2000-919371	A 20000306
			WO 2000-US5978	W 20000306

AB A polysaccharide coated carrier having a coating of at least two successive layers of polysaccharide is described. The first polysaccharide layer spontaneously assoc. with a second polysaccharide layer and, optionally, the carrier. Each successive layer of polysaccharide spontaneously assoc. with a preceding layer. Spontaneous association occurs due to the presence of oppositely charged functional groups on each layer of polysaccharide or due to a spontaneous reaction between the functional groups the layers. The carrier may be any surface such as a tube, microtitration plate, bead, particle or the like and is suitable for use in diagnostic or therapeutic methods. For example, chemiluminescent carboxylate beads (Seradyn) were coated with aminodextran and dextran aldehyde and labeled with anti-digoxin or anti-TSH antibodies. These anti-digoxin and anti-TSH antibody labeled chemiluminescent beads were tested for their performances in LOCI assays. The higher antibody concentration during the labeling resulted in chemibead-antibody reagent with better performance in the TSH LOCI assay.

IC ICM G01N033-548

ICS G01N033-543

CC 9-16 (Biochemical Methods)

Section cross-reference(s): 1, 2, 15, 64

IT 1344-28-1, Alumina, analysis 7487-88-9, Magnesium sulfate, analysis 7631-86-9, Silica, analysis 9002-86-2, Polyvinyl chloride 9002-88-4, Polyethylene 9003-01-4, Poly(acrylic acid) 9003-05-8, Polyacrylamide 9003-07-0, Polypropylene 9003-29-6D, Poly(butene), derivs. 9003-53-6, Polystyrene 9004-34-6, Cellulose, analysis 9004-35-7, Cellulose acetate 9004-70-0, Nitrocellulose 9012-36-6, Agarose 24991-31-9, Polyvinylbutyrate 25038-59-9, Polyethyleneterephthalate, analysis 25087-26-7, Poly(methacrylic acid) 141733-17-7, Seradyn

RL: ARU (Analytical role, unclassified); ANST (Analytical study)
 (preparation of carriers coated with polysaccharides for diagnostics or pharmaceutical anal.)

IT 58-85-5D, Biotin, derivs. 79-06-1, Acrylamide, reactions
 106-40-1, 4-Bromoaniline 106-89-8, reactions 106-92-3, Allyl glycidyl
 ether 112-71-0, 1-Bromotetradecane 3634-67-1 5455-98-1,
 N-(2,3-Epoxypropyl)phthalimide 7087-68-5, N,N-Diisopropylethylamine
 10026-04-7, Silicon tetrachloride 32703-80-3, 4-tert-Butyl-1,2-

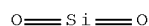
dicyanobenzene
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of carriers coated with polysaccharides for diagnostics or pharmaceutical anal.)

IT 7631-86-9, Silica, analysis

RL: ARU (Analytical role, unclassified); ANST (Analytical study)
 (preparation of carriers coated with polysaccharides for diagnostics or pharmaceutical anal.)

RN 7631-86-9 CAPLUS

CN Silica (CA INDEX NAME)



IT 79-06-1, Acrylamide, reactions

RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of carriers coated with polysaccharides for diagnostics or pharmaceutical anal.)

RN 79-06-1 CAPLUS

CN 2-Propenamide (CA INDEX NAME)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 29 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:168188 CAPLUS Full-text

DOCUMENT NUMBER: 134:204760

TITLE: Methods of immobilizing ligands on solid supports and apparatus and methods of use therefor

INVENTOR(S): Abrams, Ezra S.; Zhang, Tianhong; Mielewczyk, Slawomir; Patterson, Brian C.

PATENT ASSIGNEE(S): Mosaic Technologies Inc., USA

SOURCE: PCT Int. Appl., 98 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
WO 2001016372	A1	20010308	WO 2000-US23627	20000828
WO 2001016372	A9	20020912		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

CA 2382121 A1 20010308 CA 2000-2382121 20000828

EP 1208238 A1 20020529 EP 2000-957879 20000828

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL

US 6492118 B1 20021210 US 2000-649637 20000828

JP 2003508763 T 20030304 JP 2001-520917 20000828

AU 780882 B2 20050421 AU 2000-69437 20000828

US 2003143569 A1 20030731 US 2002-210307 20020801

US 2003143570 A1 20030731 US 2002-210400 20020801

PRIORITY APPLN. INFO.:

US 1999-151267P P 19990827

US 2000-177844P P 20000125

US 2000-649637 A3 20000828

WO 2000-US23627 W 20000828

AB A method is provided for immobilizing a ligand, e.g., a nucleic acid, on a solid support. The method includes providing a solid support containing an immobilized latent thiol group, activating the thiol group, contacting the activated thiol group with a nucleic acid comprising an acrylamide functional group, and forming a covalent bond between the two groups, thereby immobilizing the nucleic acid to the solid support. Kits containing the solid supports and method of utilizing the solid supports are also provided. Amino-functional polystyrene microspheres were reacted with N-succinimidyl S-acetylthiopropionate to make latent thiol microspheres. The latent thiol microspheres were activated with hydroxylamine HCl before reaction with acrylamide-modified oligonucleotide primer.

IC ICM C12Q001-68

ICS C12N015-10; G01N033-53

CC 9-16 (Biochemical Methods)

Section cross-reference(s): 3, 35

IT Functional groups

(acrylamide, on nucleic acid; methods of immobilizing ligands on solid supports and apparatus and methods of use therefor)

IT Primers (nucleic acid)

RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)

(acrylamide-modified, reaction products with activated thiolated microspheres; methods of immobilizing ligands on solid supports and apparatus and methods of use therefor)

IT Nucleic acids

RL: RCT (Reactant); RACT (Reactant or reagent)

(analog, immobilization of; methods of immobilizing ligands on solid supports and apparatus and methods of use therefor)

IT Glass, uses

Metals, uses

Plastics, uses

RL: DEV (Device component use); USES (Uses)

(as solid support; methods of immobilizing ligands on solid supports and apparatus and methods of use therefor)

IT Nucleic acids

RL: RCT (Reactant); RACT (Reactant or reagent)

(conjugates, with acrylamide, immobilization of; methods of immobilizing

- ligands on solid supports and apparatus and methods of use therefor)
- IT Samples
 - (contaminant detection in; methods of immobilizing ligands on solid supports and apparatus and methods of use therefor)
- IT cDNA
 - RL: ANT (Analyte); ANST (Analytical study)
 - (for rabbit β -globin; methods of immobilizing ligands on solid supports and apparatus and methods of use therefor)
- IT Silanes
 - RL: RCT (Reactant); RACT (Reactant or reagent)
 - (halosilanes; methods of immobilizing ligands on solid supports and apparatus and methods of use therefor)
- IT Nucleic acids
 - RL: ANT (Analyte); PUR (Purification or recovery); RCT (Reactant); ANST (Analytical study); PREP (Preparation); RACT (Reactant or reagent)
 - (immobilization of; methods of immobilizing ligands on solid supports and apparatus and methods of use therefor)
- IT Ligands
 - RL: RCT (Reactant); RACT (Reactant or reagent)
 - (immobilization of; methods of immobilizing ligands on solid supports and apparatus and methods of use therefor)
- IT Polymers, uses
 - RL: DEV (Device component use); USES (Uses)
 - (layer of; methods of immobilizing ligands on solid supports and apparatus and methods of use therefor)
- IT Affinity
 - (ligands; methods of immobilizing ligands on solid supports and apparatus and methods of use therefor)
- IT Genome
 - (mapping; methods of immobilizing ligands on solid supports and apparatus and methods of use therefor)
- IT Analytical apparatus
 - Biosensors
 - DNA microarray technology
 - DNA sequence analysis
 - Diagnosis
 - Genetic mapping
 - Immobilization, biochemical
 - Nucleic acid amplification (method)
 - Nucleic acid hybridization
 - Polymerization
 - Reducing agents
 - (methods of immobilizing ligands on solid supports and apparatus and methods of use therefor)
- IT Hydroxamic acids
 - Isocyanides
 - Nitriles, reactions
 - RL: RCT (Reactant); RACT (Reactant or reagent)
 - (methods of immobilizing ligands on solid supports and apparatus and methods of use therefor)
- IT Gene
 - RL: ANT (Analyte); ANST (Analytical study)
 - (monitoring expression of; methods of immobilizing ligands on solid supports and apparatus and methods of use therefor)
- IT Microspheres
 - (of polystyrene derivatized with acrylamide-functional nucleic acid; methods of immobilizing ligands on solid supports and apparatus and methods of use therefor)
- IT Hydroxyl group

- Sulfhydryl group
(on solid support; methods of immobilizing ligands on solid supports and apparatus and methods of use therefor)
- IT Amines, reactions
Disulfides
RL: RCT (Reactant); RACT (Reactant or reagent)
(on solid support; methods of immobilizing ligands on solid supports and apparatus and methods of use therefor)
- IT Genetic mapping
(phys.; methods of immobilizing ligands on solid supports and apparatus and methods of use therefor)
- IT Carbonyl compounds (organic), reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(α,β -unsatd., on affinity ligands; methods of immobilizing ligands on solid supports and apparatus and methods of use therefor)
- IT 1344-28-1, Alumina, uses 7439-89-6, Iron, uses 7439-92-1, Lead, uses 7439-96-5, Manganese, uses 7439-97-6, Mercury, uses 7440-05-3, Palladium, uses 7440-22-4, Silver, uses 7440-33-7, Tungsten, uses 7440-43-9, Cadmium, uses 7440-47-3, Chromium, uses 7440-50-8, Copper, uses 7440-57-5, Gold, uses 7440-66-6, Zinc, uses 9003-53-6, Polystyrene 14808-60-7, Quartz, uses
RL: DEV (Device component use); USES (Uses)
(as solid support; methods of immobilizing ligands on solid supports and apparatus and methods of use therefor)
- IT 868-77-9, 2-Hydroxyethylmethacrylate 2680-03-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(blocking with; methods of immobilizing ligands on solid supports and apparatus and methods of use therefor)
- IT 7631-86-9, Silica, uses
RL: DEV (Device component use); USES (Uses)
(doped or undoped, as solid support; methods of immobilizing ligands on solid supports and apparatus and methods of use therefor)
- IT 79267-33-7DP, acrylate slide-bound
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(gel; methods of immobilizing ligands on solid supports and apparatus and methods of use therefor)
- IT 4369-14-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(glass microscopes slide coated with; methods of immobilizing ligands on solid supports and apparatus and methods of use therefor)
- IT 79-39-0D, Methacrylamide, conjugates with nucleic acids
RL: RCT (Reactant); RACT (Reactant or reagent)
(immobilization of; methods of immobilizing ligands on solid supports and apparatus and methods of use therefor)
- IT 79-06-1DP, Acrylamide, polymers with sulfide acrylamine
RL: DEV (Device component use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(methods of immobilizing ligands on solid supports and apparatus and methods of use therefor)
- IT 60-24-2, β -Mercaptoethanol 79-06-1D, Acrylamide, conjugates with nucleic acids 507-09-5, Thioacetic acid, reactions 5470-11-1, Hydroxylamine hydrochloride 51805-45-9, Tris(2-carboxyethyl)phosphine hydrochloride 60984-57-8 84271-78-3 328980-38-7D, reaction with

methacrylamide

RL: RCT (Reactant); RACT (Reactant or reagent)
(methods of immobilizing ligands on solid supports
and apparatus and methods of use therefor)

IT 60984-57-8DP, acrylate slide-bound 329009-45-2P 329009-46-3DP,
acrylate slide-bound

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)

(methods of immobilizing ligands on solid supports
and apparatus and methods of use therefor)

IT 99964-73-5DP, polymers with acrylamide and thioacrylamides, acrylic
silane-coated microscope slide-bound 329009-47-4P

RL: SPN (Synthetic preparation); PREP (Preparation)
(methods of immobilizing ligands on solid supports
and apparatus and methods of use therefor)

IT 144-48-9, Iodoacetamide

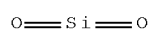
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, for capping excess thiol groups on microspheres; methods
of immobilizing ligands on solid supports and apparatus
and methods of use therefor)

IT 7631-86-9, Silica, uses

RL: DEV (Device component use); USES (Uses)
(doped or undoped, as solid support; methods of
immobilizing ligands on solid supports and apparatus and
methods of use therefor)

RN 7631-86-9 CAPLUS

CN Silica (CA INDEX NAME)



IT 79-06-1DP, Acrylamide, polymers with sulfide acrylamine

RL: DEV (Device component use); SPN (Synthetic preparation); PREP
(Preparation); USES (Uses)

(methods of immobilizing ligands on solid supports
and apparatus and methods of use therefor)

RN 79-06-1 CAPLUS

CN 2-Propenamide (CA INDEX NAME)



IT 79-06-1D, Acrylamide, conjugates with nucleic acids

RL: RCT (Reactant); RACT (Reactant or reagent)
(methods of immobilizing ligands on solid supports
and apparatus and methods of use therefor)

RN 79-06-1 CAPLUS

CN 2-Propenamide (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 30 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1999:819529 CAPLUS Full-text
DOCUMENT NUMBER: 132:60102
TITLE: Nucleic acid-coupled colorimetric analyte detectors
using self-assembling polydiacetylenic materials
INVENTOR(S): Charych, Deborah H.; Jonas, Ulrich
PATENT ASSIGNEE(S): Regents of the University of California, USA
SOURCE: PCT Int. Appl., 176 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 11
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9967423	A1	19991229	WO 1999-US14029	19990622
W: AU, CA, JP				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2330937	A1	19991229	CA 1999-2330937	19990622
AU 9947047	A	20000110	AU 1999-47047	19990622
AU 748644	B2	20020606		
EP 1112377	A1	20010704	EP 1999-930522	19990622
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2004500006	T	20040108	JP 2000-556063	19990622
PRIORITY APPLN. INFO.:			US 1998-90266P	P 19980622
			US 1999-337973	A 19990621
			WO 1999-US14029	W 19990622

AB The present invention relates to methods and compns. for the direct detection of analytes and membrane conformational changes through the detection of color changes in biopolymeric materials. In particular, the present invention provides for the direct colorimetric detection of analytes using nucleic acid ligands at surfaces or polydiacetylene liposomes and related mol. layer systems. Synthetic schemes are provided for the preparation and immobilization of polydiacetylenic materials with various head groups.

IC C12Q001-68; G01N033-53; C12N011-00; C12M001-00; C07H021-04

CC 3-1 (Biochemical Genetics)
Section cross-reference(s): 9

IT Fluoropolymers, uses
Glass, uses
Mica-group minerals, uses
RL: DEV (Device component use); USES (Uses)

(solid support; nucleic acid-coupled colorimetric analyte detectors using self-assembling polydiacetylenic materials)

IT 62-53-3D, Aniline, compds. 79-06-1D, Acrylamide, compds.
79-41-4D, Methacrylic acid, compds. 109-97-7D, Pyrrole, compds.
110-02-1D, Thiophene, compds. 1121-34-2D, Malic anhydride, compds.
19295-34-2D, Vinylpyridinium, compds.

RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(self-assembling monomers; nucleic acid-coupled colorimetric analyte detectors using self-assembling polydiacetylenic materials)

IT 7440-21-3, Silicon, uses 7440-57-5, Gold, uses 7631-86-9,
Silica, uses 9002-84-0, Teflon 9002-88-4, Polyethylene 9003-53-6,
Polystyrene 9012-36-6, Sepharose 9014-76-0, Sephadex 25014-41-9D,

Polyacrylonitrile, compds.

RL: DEV (Device component use); USES (Uses)

(solid support; nucleic acid-coupled colorimetric
analyte detectors using self-assembling polydiacetylenic materials)

IT 79-06-1D, Acrylamide, compds.

RL: ARU (Analytical role, unclassified); ANST (Analytical study)

(self-assembling monomers; nucleic acid-coupled colorimetric analyte
detectors using self-assembling polydiacetylenic materials)

RN 79-06-1 CAPLUS

CN 2-Propenamide (CA INDEX NAME)



IT 7631-86-9, Silica, uses

RL: DEV (Device component use); USES (Uses)

(solid support; nucleic acid-coupled colorimetric
analyte detectors using self-assembling polydiacetylenic materials)

RN 7631-86-9 CAPLUS

CN Silica (CA INDEX NAME)



REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 31 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1998:568970 CAPLUS Full-text

DOCUMENT NUMBER: 129:200179

TITLE: Methods and compns. for detection of analytes using
color changes that occur in biopolymeric material in
response to selective binding of analytes

INVENTOR(S): Stevens, Raymond; Quan, Cheng

PATENT ASSIGNEE(S): The Regents of the University of California, USA

SOURCE: PCT Int. Appl., 121 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 11

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9836263	A1	19980820	WO 1998-US2777	19980213
W: AU, CA, JP				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9861627	A	19980908	AU 1998-61627	19980213
EP 1007943	A1	20000614	EP 1998-906389	19980213
R: CH, DE, FR, GB, LI				
PRIORITY APPLN. INFO.:			US 1997-38383P	P 19970214
			WO 1998-US2777	W 19980213

AB The present invention relates to methods and compns. for the direct detection
of analytes using color changes that occur in biopolymeric material in
response to selective binding of analytes. The invention provides

biopolymeric materials comprising a plurality of polymerized self-assembling monomers and one or more protein ligands, wherein the biopolymeric materials change color in the presence of analyte. In some embodiments, the protein ligands are selected from the group consisting of peptides, proteins, antibodies, receptors, channels, and combinations thereof, although the present invention contemplates all protein ligands. In specific embodiments, the antibodies of the presently claimed invention are directed against Chlamydia.

IC ICM G01N021-00
ICS G01N031-20; G01N033-544; G01N033-538; G01N033-53; G01N033-567;
G01N033-537; G01N033-543; C12M001-00; C12N001-00; C12N001-20

CC 9-16 (Biochemical Methods)
Section cross-reference(s): 6, 10, 80

IT Amino group
Bacteria (Eubacteria)
Biosensors
Blood
Blood analysis
Bond
Buffers
Carboxyl group
Cell
Chelating agents
Chlamydia
Chromophores
Color
Color reaction
Colorimetry
Coupling agents
Dopants
Drugs
Electron acceptors
Electron donors
Environmental pollution
Escherichia coli
Filters
Formyl group
Fungi
Hepatitis A virus
Hepatitis B virus
Human herpesvirus
Human herpesvirus 3
Human herpesvirus 4
Human immunodeficiency virus
Human poliovirus
Hydrophilicity
Hydrophobicity
Hydroxyl group
Immobilization, biochemical
Immunoassay
Influenza virus
Ions
Molecular topology
Mycobacterium tuberculosis
Neisseria gonorrhoeae
Onchocerca
Parasite
Pathogen
Plasmodium (malarial genus)
Plasmodium falciparum

Rabies virus
 Reoviridae
 Rhinovirus
 Rubella virus
 Salmonella
 Self-assembly
 Self-association
 Spectroscopy
 Streptococcus
 Sulfhydryl group
 Surfactants
 Toxoplasma gondii
 Trypanosoma
 Vaccinia virus
 Variola virus
 Vibrio vulnificus
 Virus

(methods and compns. for detection of analytes using color changes that occur in biopolymeric material in response to selective binding of analytes)

IT Conformation

Immobilization, biochemical

(protein; methods and compns. for detection of analytes using color changes that occur in biopolymeric material in response to selective binding of analytes)

IT 56-40-6D, Glycine, diacetylene derivs., analysis 56-85-9D, L-Glutamine, diacetylene derivs., analysis 56-86-0D, L-Glutamic acid, diacetylene derivs., analysis 56-89-3D, Cystine, diacetylene derivs. 57-88-5, Cholesterol, analysis 62-53-3D, Benzenamine, siloxane derivs., analysis 63-42-3D, Lactose, diacetylene derivs. 63-91-2D, L-Phenylalanine, diacetylene derivs., analysis 71-00-1D, L-Histidine, diacetylene derivs., analysis 73-32-5D, L-Isoleucine, diacetylene derivs., analysis 79-06-1D, 2-Propenamide, derivs., analysis 83-44-3 109-97-7D, Pyrrole, derivs. 110-02-1D, Thiophene, derivs. 111-87-5, 1-Octanol, analysis 123-78-4, D-Erythro-Sphingosine 151-21-3, analysis 460-12-8D, Diacetylene, derivs. 583-93-7D, 2,6-Diaminopimelic acid, diacetylene derivs. 1121-34-2, Malic anhydride 4067-16-7D, Pentaethylenehexamine, diacetylene derivs. 7440-57-5, Gold, analysis 7631-86-9, Silica, analysis 9002-84-0, Teflon 9002-88-4 9003-53-6, Polystyrene 9012-36-6, Sepharose 9014-76-0, Sephadex 9036-19-5, Octoxynol 18358-13-9D, Methacrylate, derivs., analysis 19295-34-2, Vinylpyridinium 25014-41-9, Polyacrylonitrile 25322-68-3 29557-51-5, Dodecylphosphocholine 37758-47-7, Ganglioside GM1 58846-77-8, Decylglucoside 59247-13-1, Ganglioside GT1b 60676-86-0, Silica, vitreous 66990-32-7, 10,12-Pentacosadiynoic acid 120650-77-3 137870-33-8 138305-24-5, 5,7-Pentacosadiynoic acid 144314-93-2 146064-05-3 146064-07-5 155020-22-7 162635-75-8 178560-65-1, 5,7-Docosadiynoic acid 211996-58-6

RL: ARU (Analytical role, unclassified); ANST (Analytical study)

(methods and compns. for detection of analytes using color changes that occur in biopolymeric material in response to selective binding of analytes)

IT 79-06-1D, 2-Propenamide, derivs., analysis 7631-86-9, Silica, analysis

RL: ARU (Analytical role, unclassified); ANST (Analytical study)

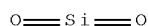
(methods and compns. for detection of analytes using color changes that occur in biopolymeric material in response to selective binding of analytes)

RN 79-06-1 CAPLUS

CN 2-Propenamide (CA INDEX NAME)



RN 7631-86-9 CAPLUS
CN Silica (CA INDEX NAME)



REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

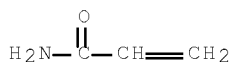
L46 ANSWER 32 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1998:115338 CAPLUS Full-text
DOCUMENT NUMBER: 128:142443
TITLE: Gel lattice membrane filter for filtering submicron
particles
INVENTOR(S): Asher, Sanford A.; Henis, Jay
PATENT ASSIGNEE(S): University of Pittsburgh of the Commonwealth System of
Higher Education, USA
SOURCE: U.S., 14 pp., Cont. of U. S. Ser. No. 151,476,
abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
US 5711884	A	19980127	US 1995-561162	19951121
US 5944994	A	19990831	US 1997-876051	19970604
US 6123845	A	20000926	US 1998-153521	19980915
US 6001251	A	19991214	US 1998-179151	19981026
PRIORITY APPLN. INFO.:			US 1990-571251	A2 19900822
			US 1993-151476	B1 19931112
			US 1995-485731	B1 19950607
			US 1997-876051	A1 19970604

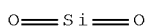
AB A solid filter material is described which filters a predetd. wavelength band from a broader spectrum of radiation. The gel membrane is prepared by creating a colloidal structure composed of particles dispersed within a medium, adding a solvent and then evaporating the solvent so that the remaining structure solidifies into a solid crystalline array. The particles can also be fused together by polymerization. Submicron particles can be filtered using the gel membrane formed from a crystalline colloidal array with an interstice size less than or equal to the particles to be filtered. The gel membrane may employ anisotropic interstices of submicron size, and it is mech. stretchable or compressible. Several gel membrane filters can be stacked so that the material to be filtered flows sequentially through the interstices of the filters leaving different size submicron particles on different levels of the filters. Particles having a pos. or neg. charge can be provided in a lattice with oppositely charged mobile particles (polymeric and inorg. particles) movable into and out of the interstices of the gel membrane. An elec. field can be used to move the mobile particles to close or

open the interstices of the lattice. The mobile particles can also pump material through the interstices. Decorative uses of the materials are described.

IC ICM B01D069-00
ICS B01D061-14
INCL 210650000
CC 47-2 (Apparatus and Plant Equipment)
Section cross-reference(s): 9, 38, 73
IT 79-06-1D, Acrylamide, polymers 80-62-6D, Methyl methacrylate, polymers 88-12-0D, polymers 110-26-9D, BisAcrylamide, polymers 7631-86-9, Silica, uses 7631-86-9D, Silica, silanized, uses 9003-53-6, Polystyrene 9011-14-7, Polymethylmethacrylate 21982-30-9D, HydroxyMethyl methacrylate, polymers
RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)
(gel lattice membrane filter for filtering submicron particles)
IT 79-06-1D, Acrylamide, polymers 7631-86-9D, Silica, silanized, uses
RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)
(gel lattice membrane filter for filtering submicron particles)
RN 79-06-1 CAPLUS
CN 2-Propenamide (CA INDEX NAME)



RN 7631-86-9 CAPLUS
CN Silica (CA INDEX NAME)



REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 33 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1997:617963 CAPLUS Full-text
DOCUMENT NUMBER: 127:283826
TITLE: Functionalized nanotubes
INVENTOR(S): Fischer, Alan; Hoch, Robert; Moy, David; Lu, Ming; Martin, Mark; Niu, Chun Ming; Ogata, Naoya; Tennent, Howard; Dong, Liwen; Sun, Ji; Helms, Larry; Jameison, Fabian; Liang, Pam; Simpson, David
PATENT ASSIGNEE(S): Hyperion Catalysis International, Inc., USA
SOURCE: PCT Int. Appl., 133 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 9732571	A1	19970912	WO 1997-US3553	19970305

W: AM, AT, AU, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT, UA, US, UZ, VN, YU

RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

CA 2247820	A1	19970912	CA 1997-2247820	19970305
AU 9721979	A	19970922	AU 1997-21979	19970305
AU 724277	B2	20000914		
EP 910340	A1	19990428	EP 1997-914892	19970305
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
CN 1217653	A	19990526	CN 1997-194402	19970305
BR 9707845	A	19990727	BR 1997-7845	19970305
JP 2002503204	T	20020129	JP 1997-531955	19970305
IL 125987	A	20030212	IL 1997-125987	19970305
RU 2200562	C2	20030320	RU 1998-116596	19970305

PRIORITY APPLN. INFO.:

US 1996-37238	P	19960306
US 1996-37238P	P	19960306
WO 1997-US3553	W	19970305

AB Graphitic nanotubes, which include tubular fullerenes (commonly called buckytubes) and fibrils, which are functionalized by chemical substitution or by adsorption of functional moieties are claimed. More specifically the invention relates to graphitic nanotubes which are uniformly or nonuniformly substituted with chemical moieties or upon which certain cyclic compds. are adsorbed and to complex structures comprised of such functionalized nanotubes linked to one another. The invention also relates to methods for introducing functional groups onto the surface of such nanotubes. The invention further relates to uses for functionalized nanotubes, which include enzyme immobilization for sample separation and immobilizing a biocatalyst capable of catalyzing a reaction on the functionalized nanotubes.

IC ICM A61K009-00

ICS A01N025-00; C09C001-56; B32B005-16

CC 66-4 (Surface Chemistry and Colloids)

Section cross-reference(s): 7

IT Solid phase synthesis

(peptide; surface functionalization of carbon nanotubes and fibrils for substance immobilization)

IT Affinity chromatographic stationary phases

Functional groups

Surface reaction

(surface functionalization of carbon nanotubes and fibrils for enzyme immobilization)

IT 7631-86-9P, Silica, preparation

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of silica-carbon fibril composite)

IT 56-87-1DP, L-Lysine, carbon fibril bonded, preparation 58-85-5DP, Biotin, surface reaction product with carbon fibrils 60-24-2DP, Monothioethylene glycol, surface reaction product with carbon nanotubes and fibrils 75-89-8DP, 2,2,2-Trifluoroethanol, surface reaction product with carbon nanotubes and fibrils 79-06-1DP, 2-Propenamide, surface reaction product with carbon nanotubes and fibrils, preparation 79-10-7DP, 2-Propenoic acid, surface reaction product with carbon nanotubes and fibrils, preparation 107-02-8DP, Propenal, surface reaction product with carbon nanotubes and fibrils 107-11-9DP, 3-Amino-1-propene, surface reaction product with carbon nanotubes and fibrils 107-13-1DP, 2-Propenenitrile, surface reaction product with carbon nanotubes and fibrils, preparation 107-18-6DP, 2-Propen-1-ol, surface reaction product with carbon nanotubes and fibrils, preparation

108-31-6DP, 2,5-Furandione, surface reaction product with carbon nanotubes and fibrils, preparation 109-72-8DP, Butyllithium, surface reaction product with carbon nanotubes and fibrils 110-16-7DP, 2-Butenedioic acid (Z)-, surface reaction product with carbon nanotubes and fibrils 111-86-4DP, 1-Octanamine, surface reaction product with carbon nanotubes and fibrils 124-30-1DP, 1-Octadecanamine, surface reaction product with carbon nanotubes and fibrils 151-50-8DP, Potassium cyanide, surface reaction product with carbon nanotubes and fibrils 530-62-1DP, N,N'-Carbonyl diimidazole, surface reaction product with carbon nanotubes and fibrils 593-56-6DP, Methoxyamine hydrochloride, surface reaction product with carbon nanotubes and fibrils 814-68-6DP, Propenoyl chloride, surface reaction product with carbon nanotubes and fibrils 994-30-9DP, Chlorotriethylsilane, surface reaction product with carbon nanotubes and fibrils 1310-73-2DP, Sodium hydroxide, surface reaction product with carbon nanotubes and fibrils 1333-74-0DP, Hydrogen, surface reaction product with carbon nanotubes and fibrils, preparation 1336-21-6DP, Ammonium hydroxide, surface reaction product with carbon nanotubes and fibrils 1892-57-5DP, 1-Ethyl-3-(3-dimethylaminopropyl)carbodiimide, surface reaction product with carbon nanotubes and fibrils 2016-57-1DP, 1-Aminodecane, surface reaction product with carbon nanotubes and fibrils 2074-87-5DP, Cyanogen, surface reaction product with carbon nanotubes and fibrils 4048-33-3DP, 6-Aminohexan-1-ol, surface reaction product with carbon nanotubes and fibrils 4781-83-3DP, 2-Iminothiolane hydrochloride, surface reaction product with carbon nanotubes and fibrils 5591-94-6DP, surface reaction product with carbon nanotubes and fibrils 5957-17-5DP, Triethyl(2-hydroxyethyl)ammonium iodide, surface reaction product with carbon nanotubes and fibrils 7664-41-7DP, Ammonia, surface reaction product with carbon nanotubes and fibrils, preparation 7664-93-9DP, Sulfuric acid, surface reaction product with carbon nanotubes and fibrils, preparation 7697-37-2DP, Nitric acid, surface reaction product with carbon nanotubes and fibrils, preparation 7704-34-9DP, Sulfur, surface reaction product with carbon nanotubes and fibrils, preparation 7732-18-5DP, Water, surface reaction product with carbon nanotubes and fibrils, preparation 7782-44-7DP, Oxygen, surface reaction product with carbon nanotubes and fibrils, preparation 13214-66-9DP, 4-Phenylbutylamine, surface reaction product with carbon nanotubes and fibrils 19008-71-0DP, 8-Aminooctan-1-ol, surface reaction product with carbon nanotubes and fibrils 23160-46-5DP, 10-Aminodecan-1-ol, surface reaction product with carbon nanotubes and fibrils 103708-09-4DP, Sulfosuccinimidyl-4-(N-maleimidomethyl)cyclohexanecarboxylate, surface reaction product with carbon nanotubes and fibrils 142755-63-3DP, 18-Aminooctadecan-1-ol, surface reaction product with carbon nanotubes and fibrils

RL: SPN (Synthetic preparation); PREP (Preparation)

(surface functionalization of carbon nanotubes and fibrils for enzyme immobilization)

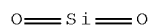
IT 7631-86-9P, Silica, preparation

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of silica-carbon fibril composite)

RN 7631-86-9 CAPLUS

CN Silica (CA INDEX NAME)



IT 79-06-1DP, 2-Propenamide, surface reaction product with carbon nanotubes and fibrils, preparation

RL: SPN (Synthetic preparation); PREP (Preparation)
 (surface functionalization of carbon nanotubes and fibrils for enzyme immobilization)

RN 79-06-1 CAPLUS

CN 2-Propenamide (CA INDEX NAME)



L46 ANSWER 34 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995:867772 CAPLUS Full-text

DOCUMENT NUMBER: 123:248568

TITLE: Process for producing endotoxin-free or endotoxin-poor nucleic acids and/or oligonucleotides for gene therapy

INVENTOR(S): Colpan, Metin; Schorr, Joachim; Moritz, Peter

PATENT ASSIGNEE(S): Qiagen GmbH, Germany

SOURCE: PCT Int. Appl., 31 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9521177	A1	19950810	WO 1995-EP389	19950203
W: AU, CA, JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
DE 4432654	A1	19960321	DE 1994-4432654	19940914
DE 4432654	C2	19980326		
CA 2182388	A1	19950810	CA 1995-2182388	19950203
CA 2182388	C	20070807		
CA 2182397	A1	19950810	CA 1995-2182397	19950203
CA 2182397	C	20040413		
AU 9516646	A	19950821	AU 1995-16646	19950203
AU 691574	B2	19980521		
WO 9608500	A1	19960321	WO 1995-EP392	19950203
W: AU, CA, JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9516647	A	19960329	AU 1995-16647	19950203
EP 743949	A1	19961127	EP 1995-908258	19950203
EP 743949	B1	19991215		
R: AT, BE, CH, DE, DK, FR, GB, IE, IT, LI, LU, NL, SE				
EP 781291	A1	19970702	EP 1995-908259	19950203
EP 781291	B1	20041208		
R: CH, DE, FR, GB, LI				
JP 09508406	T	19970826	JP 1995-520389	19950203
JP 3847779	B2	20061122		
AT 179425	T	19990515	AT 1995-907641	19950203
AT 187733	T	20000115	AT 1995-908258	19950203
US 5990301	A	19991123	US 1996-687529	19961018
US 6274371	B1	20010814	US 1997-809072	19970619
US 6297371	B1	20011002	US 1999-253702	19990222
US 2002032324	A1	20020314	US 2001-962459	20010926
US 2006194304	A1	20060831	US 2006-412130	20060427
PRIORITY APPLN. INFO.:			DE 1994-4403692	A 19940207

DE 1994-4422291	A 19940625
DE 1994-4431125	A 19940901
DE 1994-4432654	A 19940914
WO 1995-EP389	W 19950203
WO 1995-EP392	W 19950203
US 1996-687588	A3 19960731
US 1996-687529	A3 19961018
US 1998-26613	B1 19980220
US 1999-253702	A3 19990222
US 1999-443091	B3 19991118
US 2002-254845	A3 20020926

OTHER SOURCE(S): MARPAT 123:248568

AB A process is disclosed for isolating and purifying nucleic acids and/or oligonucleotides for gene therapy. The nucleic acids and/or oligonucleotides are isolated or purified from a substantially biol. source. The process is characterized in that the substantially biol. sources are disintegrated, if required the residues of biol. source are removed or eliminated from the thus obtained fractions by a mech. process known per se, such as centrifugation or filtering, the the processed fractions are treated with affinity chromatog. material or with inorg. chromatog. material for removing endotoxins, the nucleic acids and/or oligonucleotides are isolated on an anion exchanger designed so that DNA starts to be desorbed from the anion exchanger only when the sodium chloride solution ionic strength is at least about 100 mM higher than the ionic strength at which the RNA of the anion exchange material starts to be desorbed from the anion exchanger.

IC ICM C07H001-08

ICS C12N015-10; C12P019-34

CC 3-2 (Biochemical Genetics)

Section cross-reference(s): 1, 9, 15

IT 7631-86-9, Silica, biological studies

RL: ARU (Analytical role, unclassified); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(gel; process for producing endotoxin-free or endotoxin-poor nucleic acids and/or oligonucleotides for gene therapy)

IT 79-06-1, Acrylamide, biological studies 100-37-8, Deae

108-01-0, DMAE 1306-06-5, Hydroxylapatite 1314-23-4, Zirconium oxide, biological studies 1344-28-1, Aluminum oxide, biological studies 9003-53-6, Polystyrene 9004-54-0, Dextran, biological studies 9012-36-6, Agarose 13463-67-7, Titanium oxide, biological studies

RL: ARU (Analytical role, unclassified); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(process for producing endotoxin-free or endotoxin-poor nucleic acids and/or oligonucleotides for gene therapy)

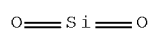
IT 7631-86-9, Silica, biological studies

RL: ARU (Analytical role, unclassified); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(gel; process for producing endotoxin-free or endotoxin-poor nucleic acids and/or oligonucleotides for gene therapy)

RN 7631-86-9 CAPLUS

CN Silica (CA INDEX NAME)



IT 79-06-1, Acrylamide, biological studies

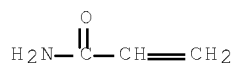
RL: ARU (Analytical role, unclassified); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(process for producing endotoxin-free or endotoxin-poor nucleic acids

and/or oligonucleotides for gene therapy)

RN 79-06-1 CAPLUS

CN 2-Propenamide (CA INDEX NAME)



L46 ANSWER 35 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1993:444706 CAPLUS Full-text

DOCUMENT NUMBER: 119:44706

TITLE: Covalently reactive particles incorporated in a continuous porous matrix

INVENTOR(S): Rasmussen, Jerald K.; Heilmann, Steven M.; Krepski, Larry R.; Coleman, Patrick L.; Milbrath, Dean S.; Walker, Margaret M.; Hagan, Donald F.; Hansen, John C.; Campbell, John C.

PATENT ASSIGNEE(S): Minnesota Mining and Manufacturing Co., USA

SOURCE: PCT Int. Appl., 40 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

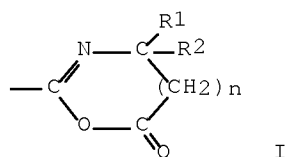
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9306925	A1	19930415	WO 1992-US8426	19921002
W: CA, JP, KR				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE				
EP 607327	A1	19940727	EP 1992-922111	19921002
EP 607327	B1	19971229		
R: BE, CH, DE, DK, FR, GB, IT, LI, NL, SE				
JP 07500363	T	19950112	JP 1993-507095	19921002
JP 3445268	B2	20030908		
PRIORITY APPLN. INFO.:			US 1991-776601	A 19911011
			WO 1992-US8426	W 19921002

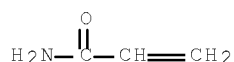
GI



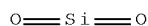
AB A composite article is provided having covalently reactive particles incorporated in a continuous, porous matrix. The reactive particles have surfaces of covalently reactive functional groups capable of directly forming covalent bonds with ligands without need for an intermediate activation step. An adduct composite particle is also provided, which comprises a continuous porous matrix and derivatized particles dispersed therein. The derivatized particles comprise a direct, covalent reaction product of ligand with the

covalently reactive particles. Methods of making and using the composite articles and adduct composite articles are also provided. Preferred covalently reactive functional groups are azlactone functional groups I (R1, R2 = C1-14 alkyl, C3-14 cycloalkyl, aryl with 5-12 ring atoms, arenyl with 6-26 C atoms and 0-3 S, N, and nonperoxidic O heteroatoms, or R1CR2 is a carbocyclic ring of 4-12 ring atoms; n = 0, 1). Thus, azlactone beads (prepared from vinyl dimethylazlactone and methylene-bis-acrylamide; according to EP 0 392 735) were incorporated into a PTFE matrix, and the resulting composite was dried. Protein A was directly covalently coupled to disks of the composite material. A fifteen-fold increase was observed in the covalent coupling of protein A to the composite beads relative to control (composite treated with ethanolamine quenching agent). Preparation of other composites is described, as is the use of the prepared composites for separation of IgG from human serum and in an immunoassay for human IgG.

IC ICM B01J020-28
 CC 9-14 (Biochemical Methods)
 IT Immobilization, biochemical
 (of ligand by direct covalent bonding, particles with covalently reactive functional groups in porous matrix for)
 IT ~~79-06-1D~~, 2-Propenamide, copolymers ~~79-39-0D~~, copolymers
 79-41-4D, esters, copolymers 108-05-4D, Acetic acid ethenyl ester, copolymers 9012-36-6, Agarose
 RL: ANST (Analytical study)
 (particles of, with covalently reactive functional groups, for direct covalent bonding of ligand)
 IT 7631-86-9, Silica, properties
 RL: PRP (Properties)
 (particles of, with covalently reactive functional groups, for direct covalent bonding of ligand)
 IT ~~79-06-1D~~, 2-Propenamide, copolymers
 RL: ANST (Analytical study)
 (particles of, with covalently reactive functional groups, for direct covalent bonding of ligand)
 RN 79-06-1 CAPLUS
 CN 2-Propenamide (CA INDEX NAME)



IT 7631-86-9, Silica, properties
 RL: PRP (Properties)
 (particles of, with covalently reactive functional groups, for direct covalent bonding of ligand)
 RN 7631-86-9 CAPLUS
 CN Silica (CA INDEX NAME)



L46 ANSWER 36 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1993:404425 CAPLUS Full-text
 DOCUMENT NUMBER: 119:4425
 TITLE: Selective affinity material, preparation thereof by molecular imprinting, and use of the same

INVENTOR(S): Glad, Magnus; Kempe, Maria; Mosbach, Klaus
 PATENT ASSIGNEE(S): Swed.
 SOURCE: PCT Int. Appl., 14 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9305068	A1	19930318	WO 1992-SE610	19920904
W: AT, AU, BB, BG, BR, CA, CH, CS, DE, DK, ES, FI, GB, HU, JP, KP, KR, LK, LU, MG, MN, MW, NL, NO, PL, RO, RU, SD, SE, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, SN, TD, TG				
SE 9102622	A	19930307	SE 1991-2622	19910906
AU 9225616	A	19930405	AU 1992-25616	19920904
EP 602154	A1	19940622	EP 1992-919401	19920904
EP 602154	B1	19990127		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, SE				
JP 06510474	T	19941124	JP 1993-504724	19920904
JP 3527239	B2	20040517		
AT 176238	T	19990215	AT 1992-919401	19920904
US 2003049870	A1	20030313	US 1994-199300	19940505
US 7122381	B2	20061017		

PRIORITY APPLN. INFO.: SE 1991-2622 A 19910906
 WO 1992-SE610 A 19920904

AB A selective adsorption material, especially suitable for adsorption of biol. macromols., is described. The adsorption material comprises a matrix with immobilized ligands which are localized to selectively adsorb a predetd. mol. The selective adsorption material can be used for purification and anal., especially of biol. macromols. A process for preparing the adsorption material includes bonding ≥ 2 immobilizable ligands to a print mol. having ≥ 2 sep. binding sites, immobilizing the ligands, then removing the print mol. The print mol. is preferably a biol. macromol. (enzyme, antibody, polysaccharide, etc.). After prebonding to the print mol. and the subsequent immobilization, the binding groups (ligands) will be bonded preferably to the surface of a matrix. The ≥ 2 immobilized ligands will be correctly spaced apart, resulting in optimal binding of the target mol. in the adsorption process. Thus, a print mol. of either RNase B (I) or soybean trypsin inhibitor (II) was mixed with methacrylate-silica, vinylimidazole, acrylpheny boric acid, acrylamide, piperazine diacrylamide, TEMED, ZnCl₂, (NH₄)₂S₂O₈, and water/DMF. The solidified reaction mixture was washed, small polymer particles were removed, and the remaining particles were packed in steel columns. When injecting RNase B on the material prepared using print mol. I, elution was delayed as compared with the adsorbent prepared using print mol. II.

IC ICM C07K003-18
 ICS B01D015-08

CC 9-3 (Biochemical Methods)
 Section cross-reference(s): 80

IT Immobilization, biochemical
 (of ligands, selective localized, print mol. in, for affinity adsorbent preparation)

IT Chromatography, column and liquid
 (affinity, stationary phases, preparation of, print mol. for ligand selective localization in)

IT 7631-86-9, Silica, uses
 RL: ANST (Analytical study)

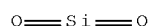
(ligand selective localized immobilization on, print mol. for, in
affinity adsorbent preparation)

IT 2530-85-0DP, 3-Methacryloyloxypropyltrimethoxysilane, silica reaction
products 7631-86-9DP, Silica, reaction products with
3-methacryloyloxypropyltrimethoxysilane
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and reaction of, in selective adsorbent preparation with print
mol.)

IT 79-06-1, Acrylamide, reactions 6342-17-2 29383-23-1, Vinyl
imidazole 147815-02-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, in selective adsorbent preparation with print mol.)

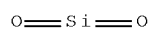
IT 7631-86-9, Silica, uses
RL: ANST (Analytical study)
(ligand selective localized immobilization on, print mol. for, in
affinity adsorbent preparation)

RN 7631-86-9 CAPLUS
CN Silica (CA INDEX NAME)



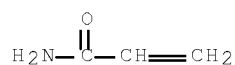
IT 7631-86-9DP, Silica, reaction products with 3-
methacryloyloxypropyltrimethoxysilane
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and reaction of, in selective adsorbent preparation with print
mol.)

RN 7631-86-9 CAPLUS
CN Silica (CA INDEX NAME)



IT 79-06-1, Acrylamide, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, in selective adsorbent preparation with print mol.)

RN 79-06-1 CAPLUS
CN 2-Propenamide (CA INDEX NAME)



L46 ANSWER 37 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1993:12234 CAPLUS Full-text
DOCUMENT NUMBER: 118:12234
TITLE: Reaction of solid-phase
hydrosilylation with participation of
.scharw.Si-H-groups of silica surface and some olefin
derivatives

AUTHOR(S): Belyakova, L. A.; Simurov, A. V.; Lyashenko D. Yu.
 CORPORATE SOURCE: Inst. Khim. Poverkhn., Kiev, Ukraine
 SOURCE: Ukrainskii Khimicheskii Zhurnal (Russian Edition)
 (1992), 58(8), 630-5
 CODEN: UKZHAU; ISSN: 0041-6045

DOCUMENT TYPE: Journal
 LANGUAGE: Russian

AB The surfaces of SiO₂ were characterized by IR spectroscopy after solid phase hydrosilylation reactions involving .scharw.Si-H groups and unstd. organic compds. (vinyltrimethylsilane, vinyltrichlorosilane, acetylacetone, vinyl acetate, acrylamide). A relation was established between reaction capacity and structure for these olefins. The IR spectra showed that Si-C bonds are formed during the surface reactions of all of these olefins.

CC 66-5 (Surface Chemistry and Colloids)
 Section cross-reference(s): 22, 29

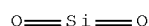
ST solid phase hydrosilylation silica alkene
 functionalized; IR spectra surface reaction silica alkene

IT 7631-86-9, Silica, properties
 RL: PRP (Properties)
 (surface hydrosilylation on, unsatd. organic compound effects on solid-phase)

IT 79-06-1, Acrylamide, reactions 108-05-4, Vinyl acetate, reactions 123-54-6, Acetylacetone, reactions 754-05-2, Vinyltrimethylsilane
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (surface reaction of, with silica)

IT 7631-86-9, Silica, properties
 RL: PRP (Properties)
 (surface hydrosilylation on, unsatd. organic compound effects on solid-phase)

RN 7631-86-9 CAPLUS
 CN Silica (CA INDEX NAME)



IT 79-06-1, Acrylamide, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (surface reaction of, with silica)

RN 79-06-1 CAPLUS
 CN 2-Propenamide (CA INDEX NAME)



L46 ANSWER 38 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1992:629619 CAPLUS Full-text
 DOCUMENT NUMBER: 117:229619
 TITLE: stationary phase material for HPLC
 INVENTOR(S): Hjerten, Stellan; Liao, Jia Li
 PATENT ASSIGNEE(S): Bio-Rad Laboratories, Inc., USA
 SOURCE: U.S., 27 pp. Cont.-in-part of U.S. Ser. No. 370,921, abandoned.
 CODEN: USXXAM

DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5135650	A	19920804	US 1990-518038	19900502
PRIORITY APPLN. INFO.:			US 1988-288600	B2 19881222
			US 1989-370921	B2 19890623

AB Highly compressible stationary phase material, e.g. agarose beads, are made rigid to a degree suitable for use in HPLC and nonporous to proteins by 1 of 2 procedures. The 1st involves shrinking the beads with the use of an organic solvent in which the agarose bead will neither dissolve nor swell to collapse the porosity, followed by crosslinking the bead surfaces inside the collapsed pores to fix the pores in their collapsed state. The 2nd involves filling the pores (without shrinkage of the beads) with a polymerizable substance which grafts to the pore surface, and performing the graft polymerization. The invention also extends to rigid beads, which are rendered deformable to a limited degree by coating the surface with a polymer. Finally, porous rigid beads are rendered nonporous by polymerizing a polymerizable material inside the pores in the same manner as the porous compressible beads. Preparation and testing of a variety of chromatog. stationary phases is described. Thus, macroporous agarose beads were collected, and the water in the beads was exchanged for dioxane. On washing with a dioxane-CHCl₃ mixture, the volume of the sedimented beads decreased by approx. 65%, with the diameter of the shrunken beads being 10-50 μ m. The beads were further reacted with octanol, and the octyl agarose beads formed were used for hydrophobic interaction chromatog. Elution of human transferrin is shown; resolution increased with flow rate.

IC ICM B01D015-08

INCL 210198200

CC 9-3 (Biochemical Methods)

Section cross-reference(s): 80

ST compressible chromatog stationary phase particle;
 agarose stationary phase HPLC; octyl agarose
 hydrophobic interaction chromatog

IT Epoxides

RL: SPN (Synthetic preparation); PREP (Preparation)

(as crosslinking agent, in agarose bead preparation for chromatog.
 stationary phase)

IT Albumins, analysis

Hemoglobins

Myoglobins

Ovalbumins

Phytoerythrins

Thyroglobulins

Transferrins

RL: ANT (Analyte); ANST (Analytical study)

(chromatog. of, with nonporous agarose bead-based HPLC
 stationary phase)

IT Crosslinking agents

(in agarose bead preparation for chromatog. stationary
 phase)

IT Proteins, uses

RL: USES (Uses)

(low-porosity agarose beads impermeable to, for HPLC stationary
 phase)

IT Solvents

(organic, in agarose bead preparation for chromatog. stationary

- phase)
- IT Epoxides
RL: SPN (Synthetic preparation); PREP (Preparation)
(di-, as crosslinking agent, in agarose bead preparation for chromatog. stationary phase)
- IT Chromatography, column and liquid
(focusing, polyethyleneimine-derivatized nonporous agarose bead-based stationary phase for)
- IT Hemoglobins
RL: ANT (Analyte); ANST (Analytical study)
(glyco-, HPLC of, with nonporous agarose bead-based stationary phase)
- IT Chromatography, column and liquid
(high-performance, beads of agarose or other material for stationary phase for, preparation of)
- IT Chromatography, column and liquid
(hydrophobic, nonporous agarose bead-based stationary phase for)
- IT 2425-79-8, 1,4-Butanediol diglycidyl ether 2530-83-8, γ -Glycidoxypropyltrimethoxysilane
RL: ANST (Analytical study)
(as crosslinking agent, in agarose bead preparation for chromatog. stationary phase)
- IT 9012-36-6, Agarose
RL: ANST (Analytical study)
(beads, low-porosity protein-impermeable, for HPLC stationary phase)
- IT 7631-86-9P, Silica, biological studies
RL: SPN (Synthetic preparation); PREP (Preparation)
(beads, nonporous, preparation of, for HPLC stationary phase)
- IT 9001-05-2, Catalase 9001-63-2, Lysozyme 9001-99-4, Ribonuclease 9007-43-6, Cytochrome c, analysis 9035-75-0, α -Chymotrypsinogen A
RL: ANT (Analyte); ANST (Analytical study)
(chromatog. of, with nonporous agarose bead-based HPLC stationary phase)
- IT 9001-60-9, Lactate dehydrogenase
RL: ANT (Analyte); ANST (Analytical study)
(chromatog. of, with nonporous silica bead-based stationary phase)
- IT 123-91-1, Dioxane, biological studies 144422-01-5 144490-95-9
RL: ANST (Analytical study)
(in agarose bead preparation for HPLC stationary phase)
- IT 7732-18-5, Water, analysis
RL: ANST (Analytical study)
(organic solvent miscible in, in agarose bead preparation for chromatog. stationary phase)
- IT 124-40-3DP, reaction products with nonporous agarose beads 9012-36-6DP, Agarose, reaction products with diamethylamine
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, for HPLC stationary phase)
- IT 79-06-1, Acrylamide, reactions 106-92-3, Allylglycidyl ether 556-52-5, Glycidol 3033-77-0, Glycidyl trimethylammonium chloride 29063-28-3, Octanol
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, in HPLC stationary phase preparation with nonporous agarose beads)
- IT 98-80-6, Phenylboronic acid
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, in HPLC stationary phase preparation with

nonporous agarose beads, (non)glycosylated Hb separation with)

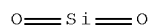
IT 9002-98-6
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, in chromatofocusing stationary phase
 preparation with nonporous agarose beads)

IT 924-42-5, N-Methylolacrylamide 1464-53-5, 1,3-Butadiene diepoxide
 5926-90-9, Hexylglycidyl ether
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, in nonporous silica bead preparation for HPLC
 stationary phase)

IT 124-40-3, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with nonporous agarose beads, for HPLC stationary
 phase)

IT 7631-86-9P, Silica, biological studies
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (beads, nonporous, preparation of, for HPLC stationary
 phase)

RN 7631-86-9 CAPLUS
 CN Silica (CA INDEX NAME)



IT 79-06-1, Acrylamide, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, in HPLC stationary phase preparation with
 nonporous agarose beads)

RN 79-06-1 CAPLUS
 CN 2-Propenamide (CA INDEX NAME)



L46 ANSWER 39 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1990:154843 CAPLUS Full-text

DOCUMENT NUMBER: 112:154843

TITLE: Capillary gel electrophoresis columns

INVENTOR(S): Karger, Barry L.; Cohen, Aharon S.

PATENT ASSIGNEE(S): Northeastern University, USA

SOURCE: Eur. Pat. Appl., 18 pp.
 CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 8

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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EP 324539	A2	19890719	EP 1989-300055	19890105
EP 324539	A3	19900530		
R: CH, DE, FR, GB, IT, LI, SE				
US 4865707	A	19890912	US 1988-143442	19880112
PRIORITY APPLN. INFO.:			US 1988-143442	A 19880112

US 1986-921311

A2 19861021

AB A microcapillary column for high-performance electrophoresis includes a microcapillary, a hydrophilic polymer within a gel of crosslinked polyacrylamide polymerized in the tube, and preferably, a thin layer of connecting material covalently bonded to the inner surface of the microcapillary wall and to the polymeric gel. The microcapillary is prepared by 1st covalently bonding a suitable bifunctional reagent to the inner surface of the microcapillary wall, and then causing a mixture of the hydrophilic polymer, monomer, crosslinking agent, and polymerization catalyst to react in the bore of the microcapillary to form a hydrophilic polymer-containing gel matrix which is covalently bonded to the microcapillary wall via the bifunctional reagent. In electrophoresis, this gel-containing microcapillary can provide peak efficiencies >100,000 theor. plates within separation times of <30 min, permits trace level detns. of mol. wts., and permits electrophoretic operation at fields ≥ 1000 V/cm, resulting in extremely high-resolution sepns. Fused silica microcapillary tubing having an internal diameter of 75 μ M, a wall thickness of 30 μ M, and polyimide coating, was treated with bifunctional 3- methacryloxypropyltrimethoxysilane and filled with a soln having T = 6%, C = 3.3% and containing acrylamide, N,N'-methylenebisacrylamide, and 20 weight/volume% PEG. Addition of 3.0 μ L TEMED and 5 μ L persulfate gave a polymerization time of .apprx.45 min. A mixture of recombinant human growth hormone and the corresponding 2-chain material (having proteolytic clip between amino acids 142 and 143) was separated using the microcapillary.

IC ICM G01N027-26

CC 9-7 (Biochemical Methods)
Section cross-reference(s): 2, 80

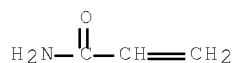
IT 79-06-1D, 2-Propenamide, copolymers 25034-58-6 27791-61-3
92625-61-1 112526-69-9 125998-77-8
RL: ANST (Analytical study)
(hydrophilic polymer-containing, microcapillary-crosslinked, for high-performance gel electrophoresis)

IT 1304-56-9, Beryllia 1344-28-1, Alumina, analysis 7631-86-9D, Silica, derivs. 9002-84-0, Teflon
RL: ANST (Analytical study)
(microcapillary of, polymeric gel and hydrophilic polymer crosslinked to, for high-performance gel electrophoresis)

IT 79-06-1D, 2-Propenamide, copolymers
RL: ANST (Analytical study)
(hydrophilic polymer-containing, microcapillary-crosslinked, for high-performance gel electrophoresis)

RN 79-06-1 CAPLUS

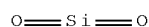
CN 2-Propenamide (CA INDEX NAME)



IT 7631-86-9D, Silica, derivs.
RL: ANST (Analytical study)
(microcapillary of, polymeric gel and hydrophilic polymer crosslinked to, for high-performance gel electrophoresis)

RN 7631-86-9 CAPLUS

CN Silica (CA INDEX NAME)



L46 ANSWER 40 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1979:51095 CAPLUS Full-text

DOCUMENT NUMBER: 90:51095

ORIGINAL REFERENCE NO.: 90:8141a,8144a

TITLE: Radioimmunoassay system

INVENTOR(S): Hales, Richard Harold

PATENT ASSIGNEE(S): Becton, Dickinson and Co., USA

SOURCE: U.S., 10 pp.
CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4108975	A	19780822	US 1977-774277	19770304
PRIORITY APPLN. INFO.:			US 1977-774277	A 19770304

AB A reusable immunoabsorbent for radioimmunoassays is described. The adsorbent includes a refractory material with a polymeric material bonded to it and to which is linked on acyl azide, carbonate, thiocarbonate, polythiol, isocyanate, epoxide, or chlorothioformate group for reaction with the CO₂H or NH₂ group of the antibody. The refractory material is a glass with a porous surface and a nonporous core. The barrier coating polymer is a vinyl compound, CM-cellulose, or dextran, and the linking group is preferably acyl azide or polythiol. Thus, 25g Zipax carrier is refluxed with 41 mL vinyltrichlorosilane in 85 mL isooctane for 2 h, the product is filtered, washed with isooctane or acetone and dried. A 6.25-g sample was refluxed 2 h with 2.5 mL acrylic acid and 0.25 g benzoyl peroxide in 624 mL MeCN to form a poly(acrylic acid)-coated derivative, which was filtered, extracted with MeCN, Me₂CO, and H₂O, and dried. The derivative was treated with thionyl chloride to form the polyacid chloride, which was treated with NaN₃ to form the polyazide. The polyazide was treated with antibody to prepare the immunoabsorbent.

IC G01N033-16

INCL 424001000

CC 9-5 (Biochemical Methods)

Section cross-reference(s): 2

IT 7631-86-9, reactions

RL: RCT (Reactant); RACT (Reactant or reagent)

(pellicular, antibodies immobilization on, as reusable immunoabsorbents for radioimmunoassay)

IT 79-06-1DP, polymers with Zipax 79-10-7DP, polymers with Zipax
107-18-6DP, polymers with Zipax 870-23-5DP, polymers with Zipax

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, radioimmunoassay immunoabsorbents preparation in relation

to)

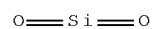
IT 7631-86-9, reactions

RL: RCT (Reactant); RACT (Reactant or reagent)

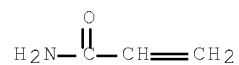
(pellicular, antibodies immobilization on, as reusable immunoabsorbents for radioimmunoassay)

RN 7631-86-9 CAPLUS

CN Silica (CA INDEX NAME)



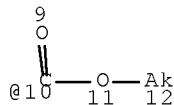
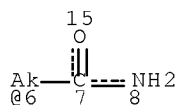
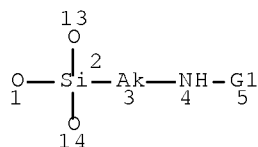
IT 79-06-1DP, polymers with Zipax
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of, radioimmunoassay immunoadsorbents preparation in relation
 to)
 RN 79-06-1 CAPLUS
 CN 2-Propenamide (CA INDEX NAME)



FILE 'HOME' ENTERED AT 10:13:08 ON 17 MAR 2008

SEARCH HISTORY

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E US2006-569155/APPS

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SUPPORT#/OBI)
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L16 8921 SEA ABB=ON L7/D
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L18 16 SEA ABB=ON L15 NOT (L1 OR L17)
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L19 3 SEA ABB=ON L6
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D SCAN
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L21 23 SEA ABB=ON L13 AND L20
L22 3 SEA ABB=ON L12 AND L16 AND L20
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L23 710 SEA ABB=ON L11(L)AMX/RL
L24 1 SEA ABB=ON L23 AND L12
L25 2342540 SEA ABB=ON PHARMAC?/SC, SX
L26 3 SEA ABB=ON L25 AND L13 AND L20
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E E2+NT1
E E1+OLD
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D QUE L19
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L39 1852 SEA ABB=ON BOYD R?/AU
L40 84 SEA ABB=ON DASILVA J?/AU
L41 146 SEA ABB=ON GOLDEN K?/AU
L42 1 SEA ABB=ON NTIGYABAAH J?/AU
L43 547 SEA ABB=ON WELCH C?/AU
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